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VOLUME III

COPY NO. 4

THE ORIGINAL DOCUMENT WAS OF POOR
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SPECIAL ACCEPTANCE TEST PERFORMED ON THE

GRUMMAN AIRCRAFT ENGINEERING CORPORATION

MODEL 128E10005-5 NOSE RADOME, SERIAL NO. 4,

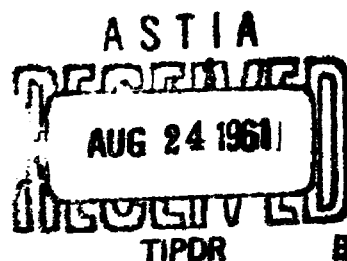
FOR THE A2F-1 AIRCRAFT

R.C. REPORT NO. GRU3-4

PREPARED UNDER U.S. NAVY CONTRACT NO. NOa(S)59-0259c

APRIL 19, 1961

MANUFACTURER: BRUNSWICK CORPORATION
MARION, VIRGINIA



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SECTION 29

TRACK BORESIGHT ERROR

$F_H @ 0^\circ$ ROLL

Re: No. CAU3-4

DATE TESTED 3-3-67

TESTED BY CLARK

BEAM DEFLECTION ERROR

☒ Azimuth Scan ☒ In-Plane Error

☐ Elevation Scan ☐ Cross-Talk Error

☒ TERRAIN CLEARANCE

☐ TRACK

☒ Upright

☐ Down

Reflected: ☐ Up ☐ Down

☐ SEARCH

DEGREES

0° 15° 30° 45° 60°

ANTENNA POSITION

ANTENNA ELEVATION

ANTENNA

TRACK

SEARCH AND

TERRAIN CLEARANCE

FREQUENCY 14.1 KMC

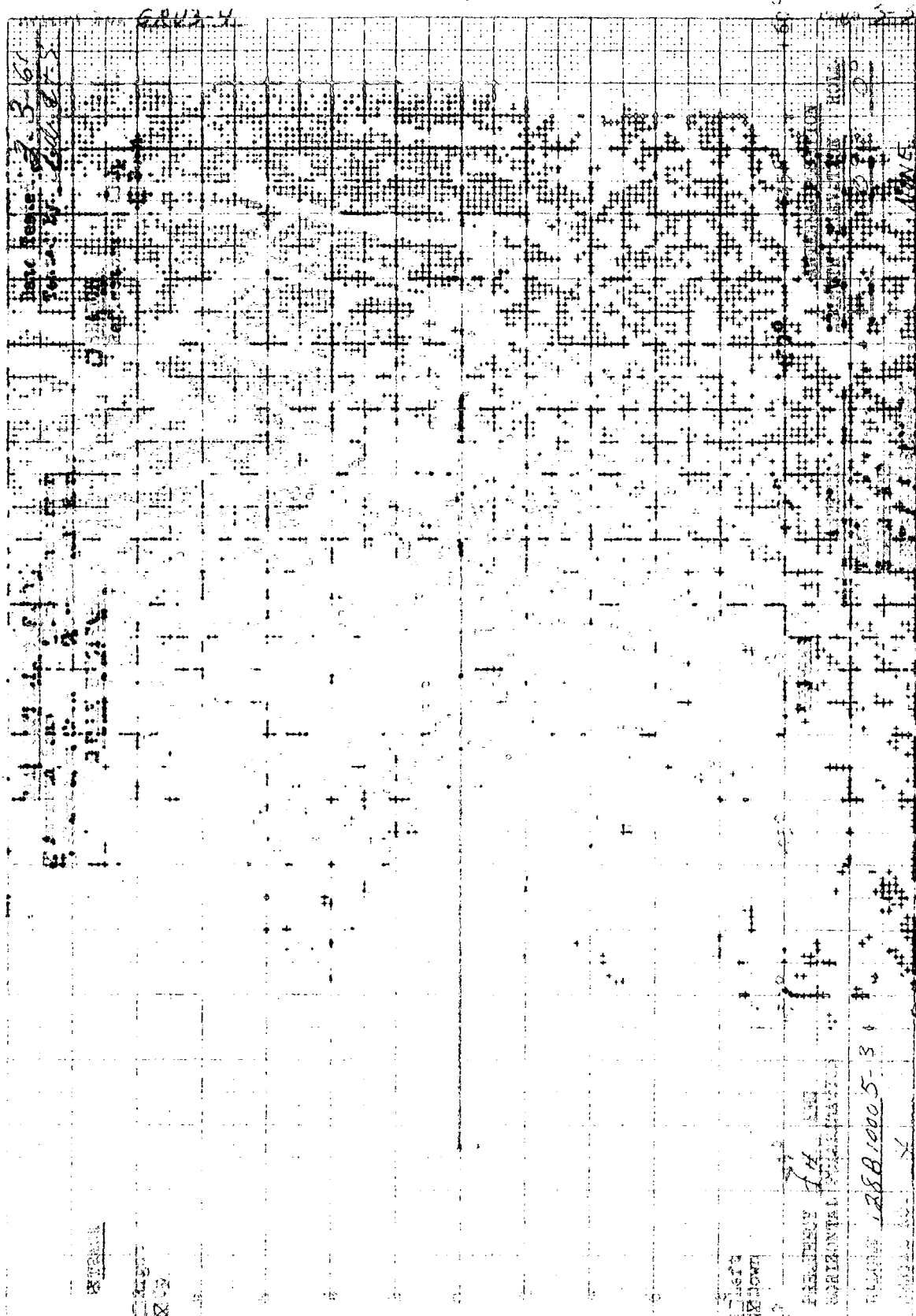
HORIZONTAL POLARIZATION

RADONE 1.28 B100 5-3

SERIAL NO. 14

NAME

Document was of poor
best possible reproduction
COPY FURNISHED ANITA



GRU 3-4

100 % LEVEL

12881000.5

X

3-10-1954

W. C. C. F. C.

2025

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4

4

5

1

Left
Down

FREQUENCY $\frac{1}{2}$ HZ
HORIZONTAL POLARIZATION

1
2003

SECRET

RECEIVED
U.S. DEPT. OF JUSTICE
FEB 10 1968

三、

2-13-61
CAT

GA 13-4

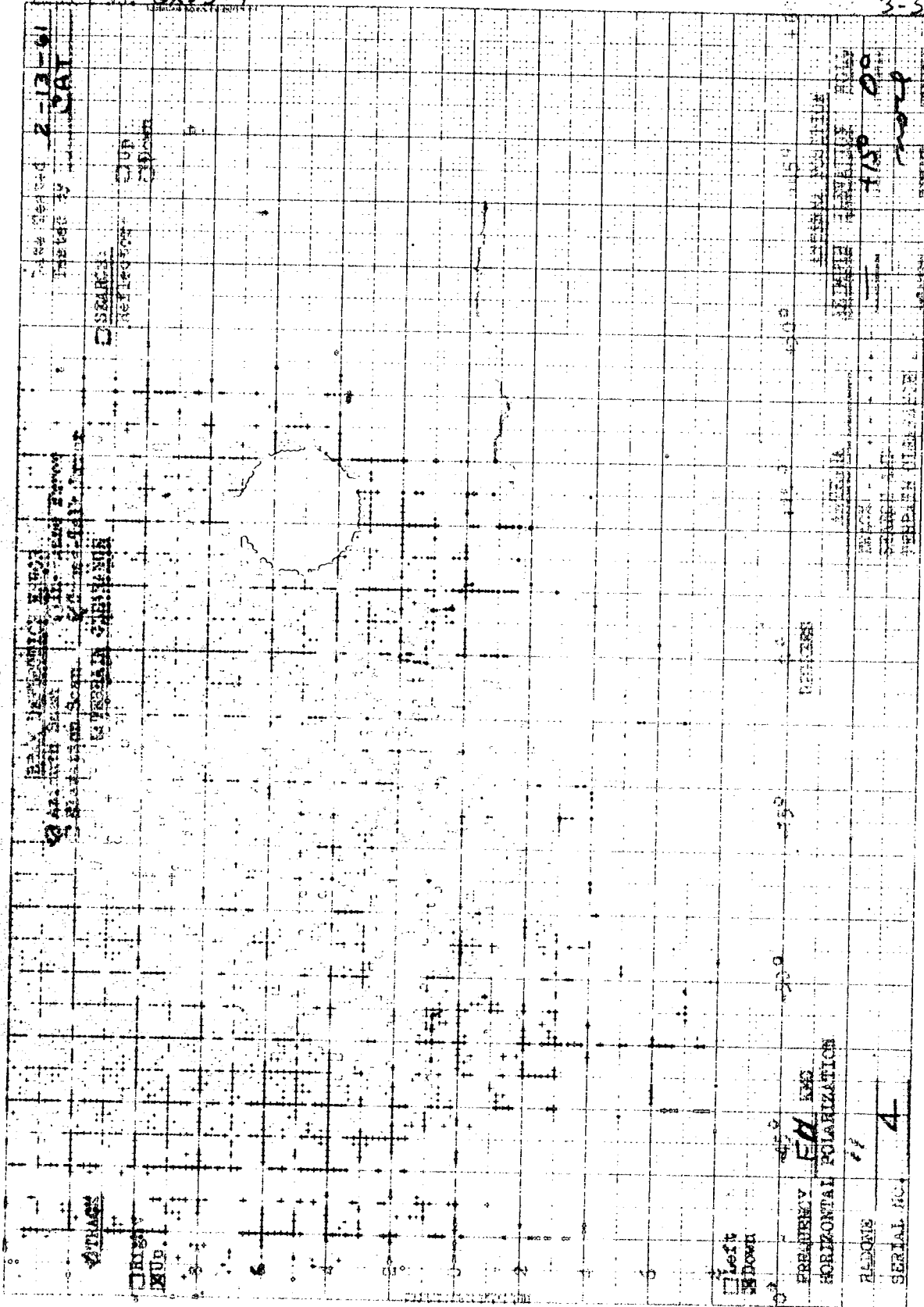
3-4

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2021

GRV3-4

3-5



2-13-61

UAT

SEARCH

REFLECTOR

UP

DOWN

MAX. REFLECTANCE 100%

3. AMPLITUDE SCALE 100% REFLECTANCE

STANDARD SCALING 100% REFLECTANCE

STANDARD SCALING

TRACE

UP

DOWN

Left

Right

FREQUENCY 100 MHz
HORIZONTAL POLARIZATION

ALONE

SERIAL NO.

4

REFLECTOR

UP

DOWN

REFLECTOR

UP

DOWN

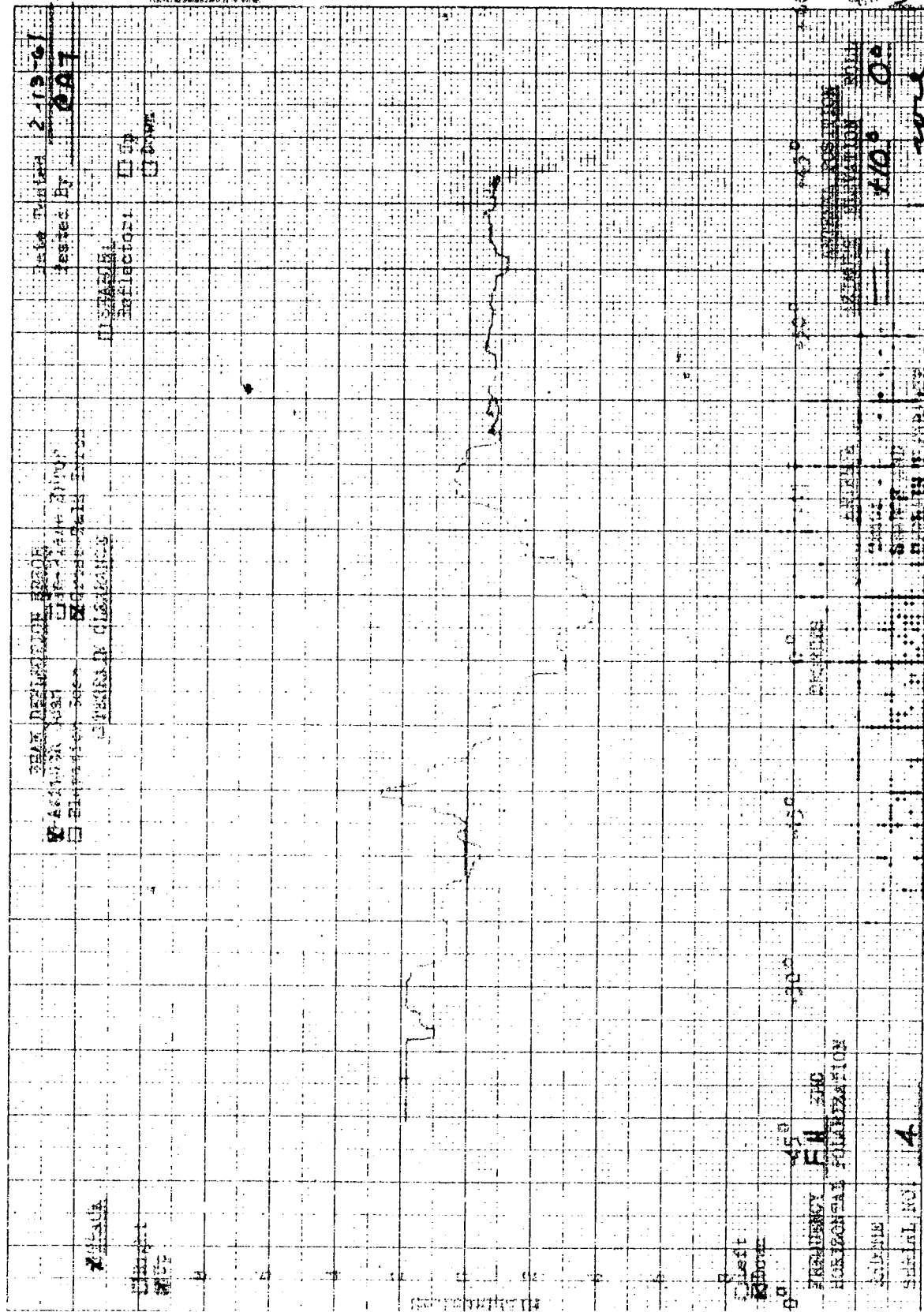
100

100

100

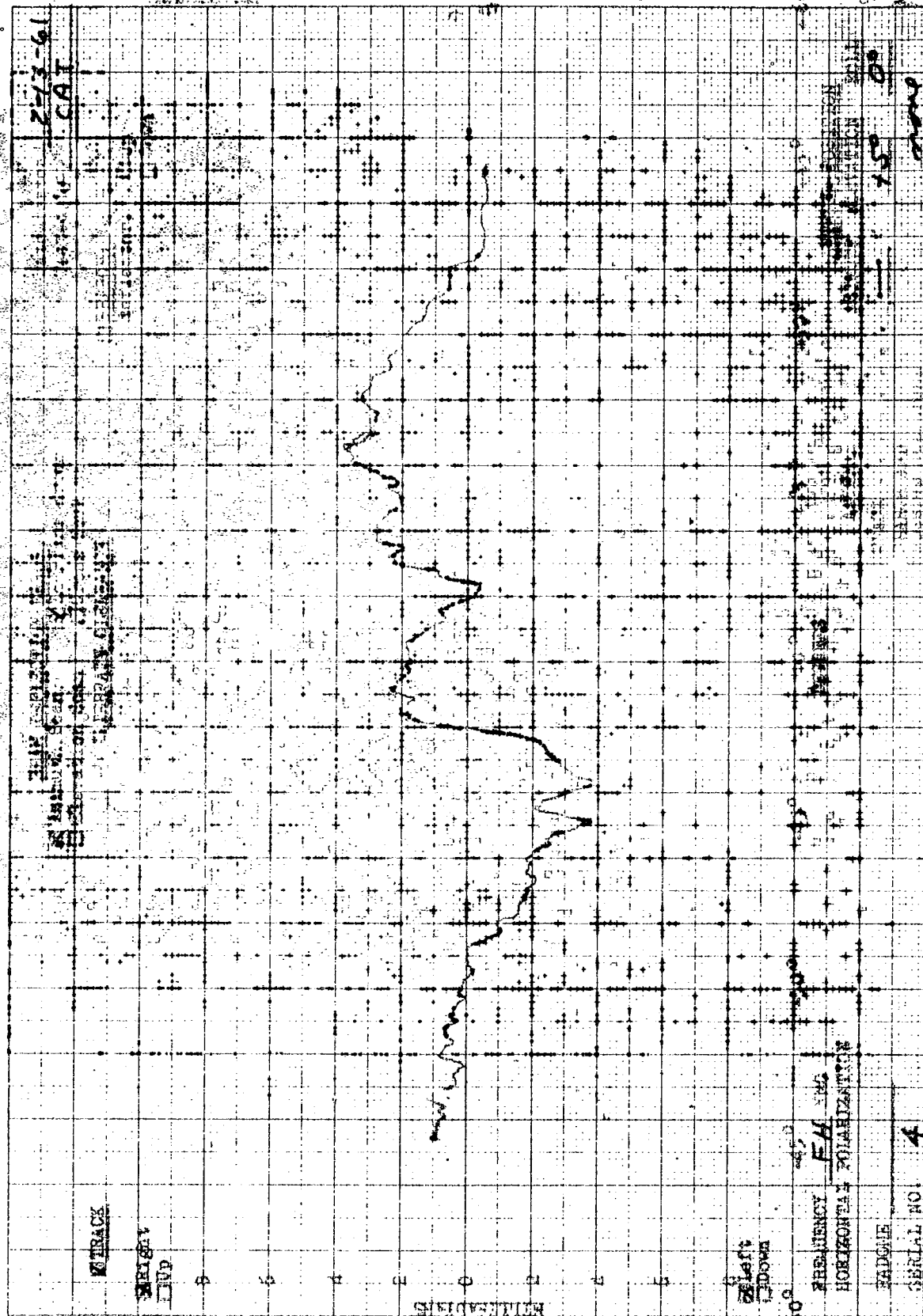
100

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GR03-4

3-5



2-13-61
CAT

WTRACK

WTRACK
END

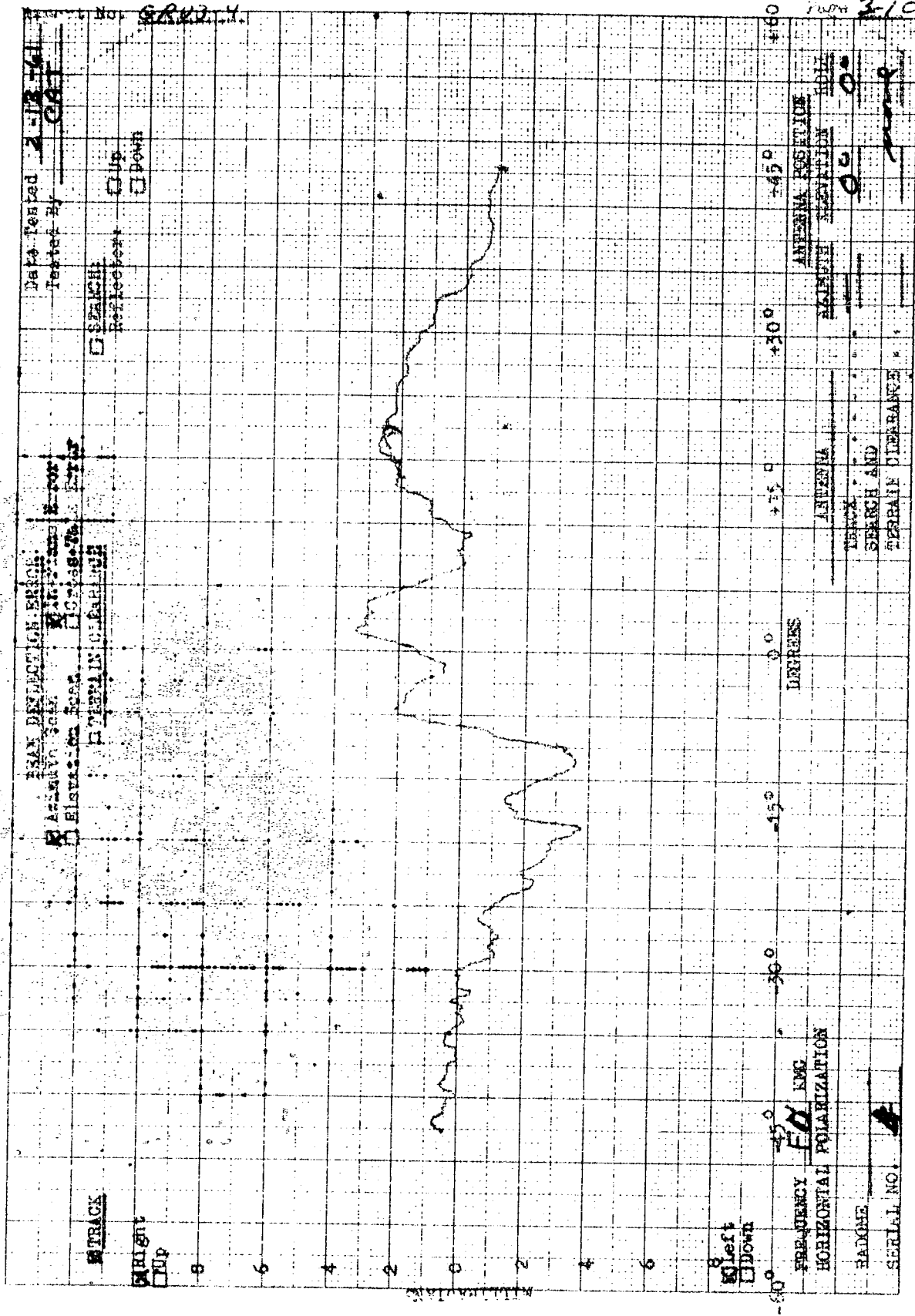
WTRACK
END

WTRACK
END

WTRACK
END

WTRACK
END

[illegible]



GR03-4

3-11

DATE TESTED 2-13-61

TESTED BY GAT

SEARCHER ☐ **REFLECTOR** ☐ **50m**

TESTING LOCATION ☐ **14-Plane Plot**

ANTENNA ☒ **14-Plane Plot**

REMARKS ☐ **14-Plane Plot**

TERRESTRIAL CLEARANCE ☐

TRACK ☐ **UP**

UPRIGHT ☐ **DOWN**

8

6

4

2

0

2

4

6

8

Left ☐ **Right** ☐

60°

45°

30°

15°

0°

15°

30°

45°

60°

FREQUENCY 14.1 MC

HORIZONTAL POLARIZATION

RADOME

SERIAL NO. 4

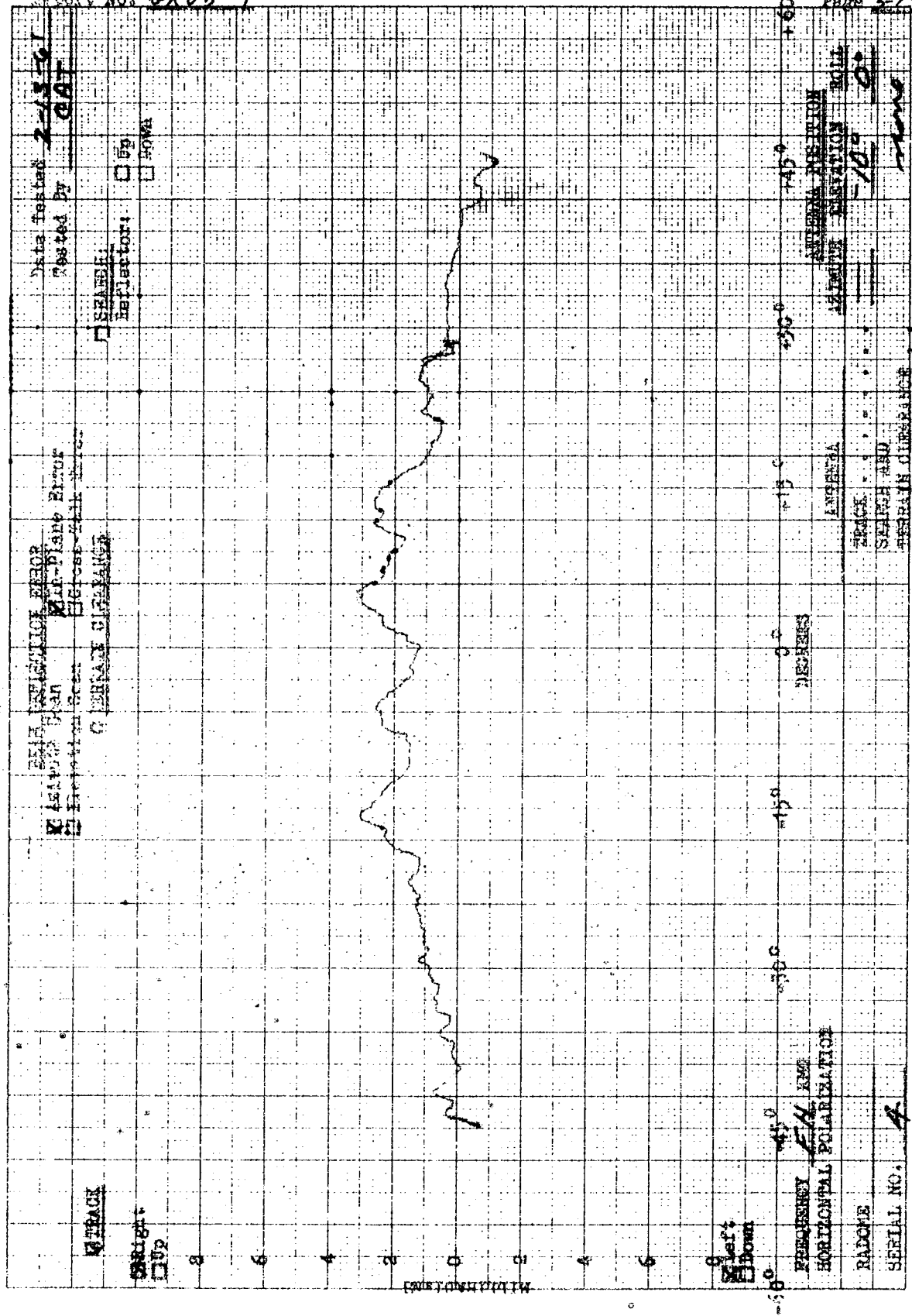
ANTENNA POSITION

ANTENNA ELEVATION 0°

TRACK AND 0°

TERRAIN CLEARANCE none

21



Tube Tested 2-13-61
Tested by CAT

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THE HOLLAND C

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Reflected: 4416

10

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7-10-68

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100

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FFREQUENCY
FH
INC
POLARIZATION

Salisbury

REF ID: A63584

[illegible]

王明賢 1975.12.15

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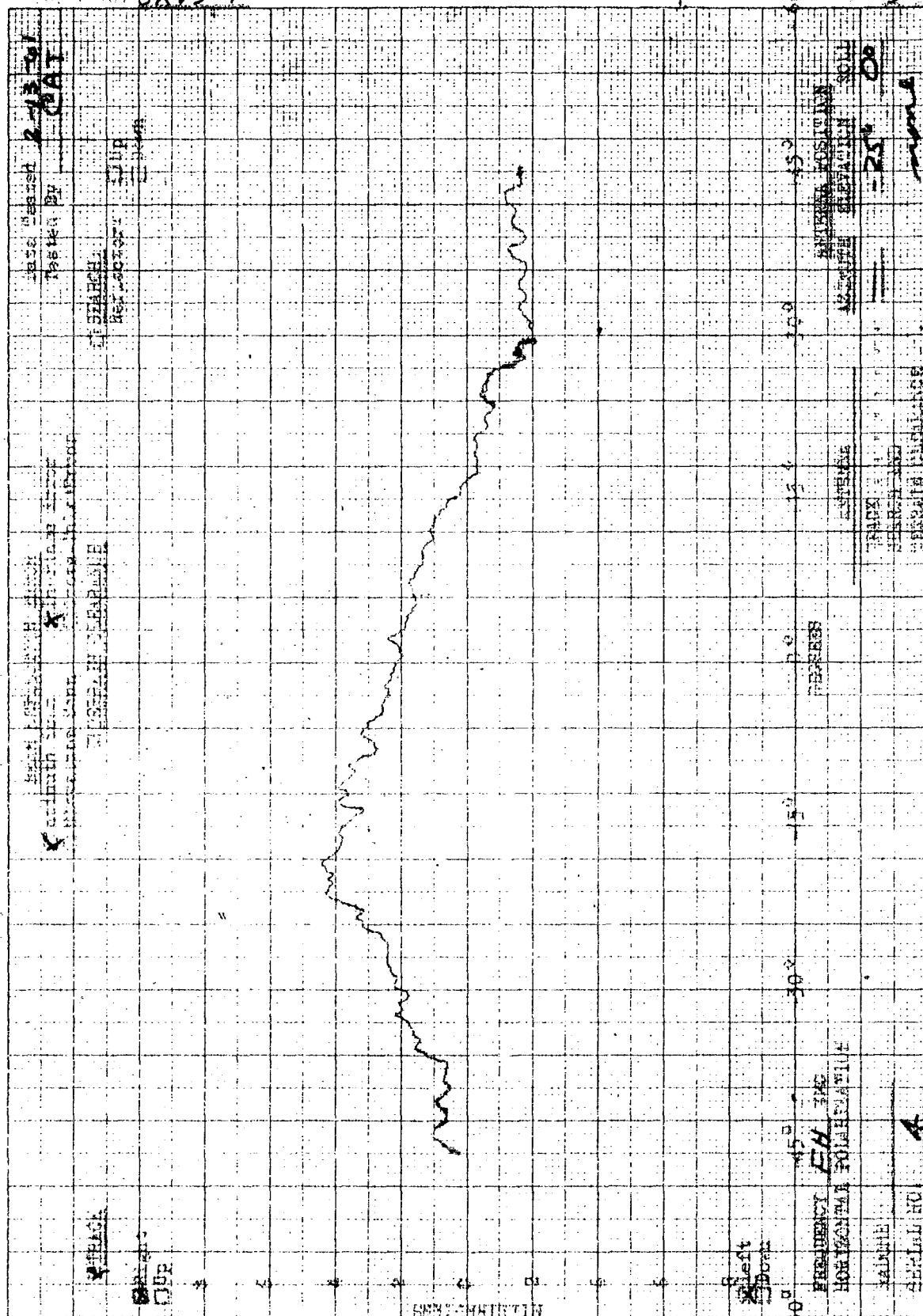
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<p>BEAN CANTENMENT BECK</p> <p><input checked="" type="checkbox"/> Asymmetric Beam <input type="checkbox"/> Azimuth Error</p> <p><input type="checkbox"/> Elevation Error <input checked="" type="checkbox"/> Ground-Talk Error</p> <p><input type="checkbox"/> Terrain Clearance</p>		<p>Data Tested <u>2-13-61</u></p> <p>Tested By <u>CHT</u></p>	
<p>TRACK</p> <p><input type="checkbox"/> Right</p> <p><input checked="" type="checkbox"/> Up</p>		<p>SEARCH</p> <p>Reflector: <input type="checkbox"/> Up</p> <p><input checked="" type="checkbox"/> Down</p>	
<p>8</p> <p>6</p> <p>4</p> <p>2</p> <p>0</p> <p>2</p> <p>4</p> <p>6</p> <p>8</p>		<p>0.0</p> <p>15.0</p> <p>30.0</p> <p>45.0</p> <p>60.0</p>	
<p>MILLIMETERS</p>		<p>DEGREES</p>	
<p>FREQUENCY <u>FA</u> ZNC</p> <p>HORIZONTAL POLARIZATION</p>		<p>ANTENNA POSITION</p> <p>ANTENNA ELEVATION <u>0.0</u></p>	
<p>RADOME</p>		<p>TRACK <u>0.0</u></p> <p>SEARCH ASU</p> <p>TERRAIN CLEARANCE</p>	
<p>SERIAL NO. <u>4</u></p>		<p><u>mm</u></p>	

GRV3-4

Page 3-18



PRAM DEFLECTION ERROR	PRAM DEFLECTION ERROR
ASSEMBLY SIZE	ASSEMBLY SIZE
Production Size	Production Size

Tested by 143
Tested by 1947-2

PROCESSES

reflector:	bulb	illum
------------	------	-------

BACKTRACK

21817
250

40
FREQUENCY 54 MHz
HORIZONTAL POLARIZATION

END CITY

243

ANTENNA POSITION

ALFRED HENRI

[illegible]

3444

TABLE CLASS

SECRET

一、

[illegible][illegible]

Table 2

7

EGEZONTAL POLSIZLE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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4

7

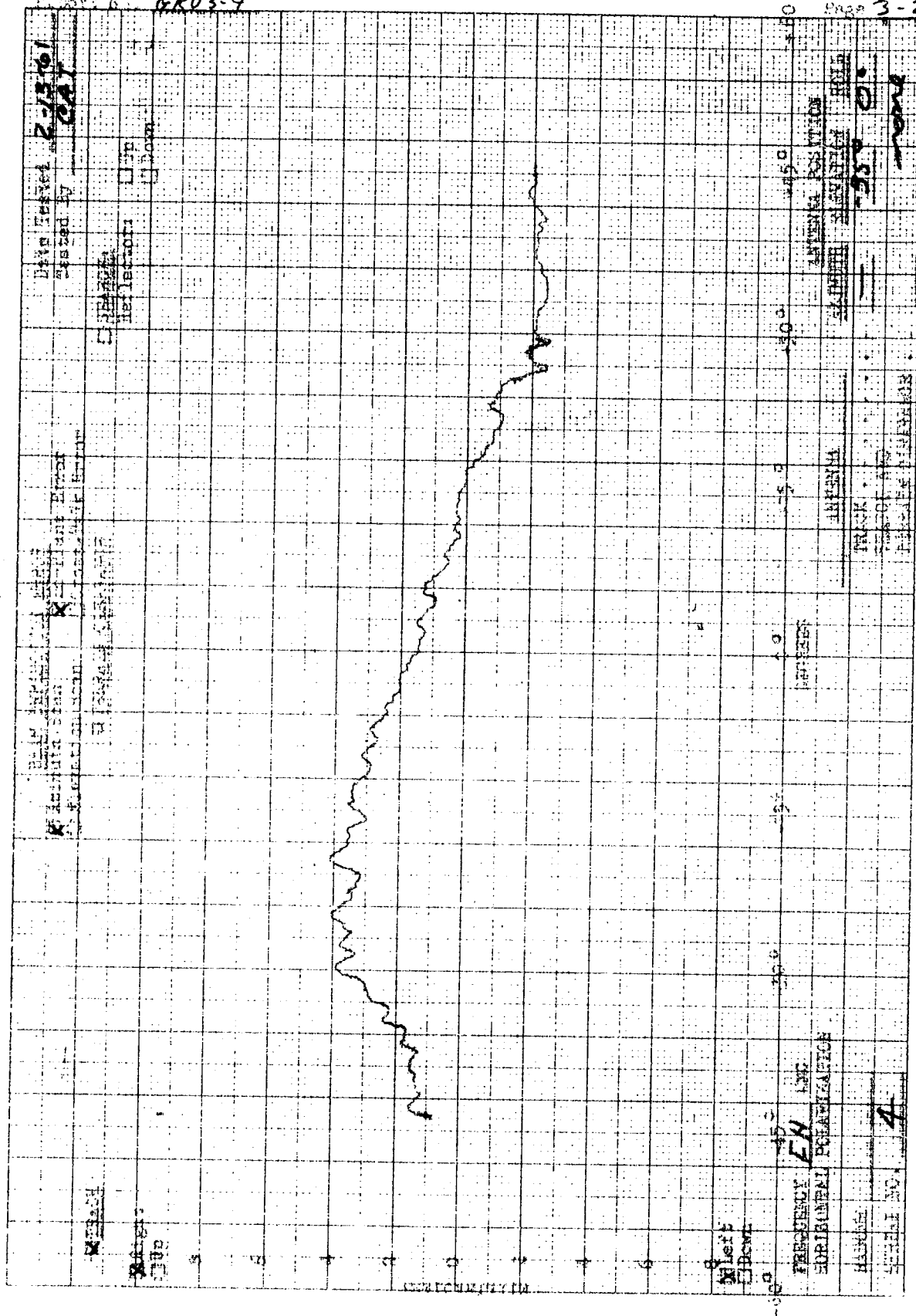
SECRET

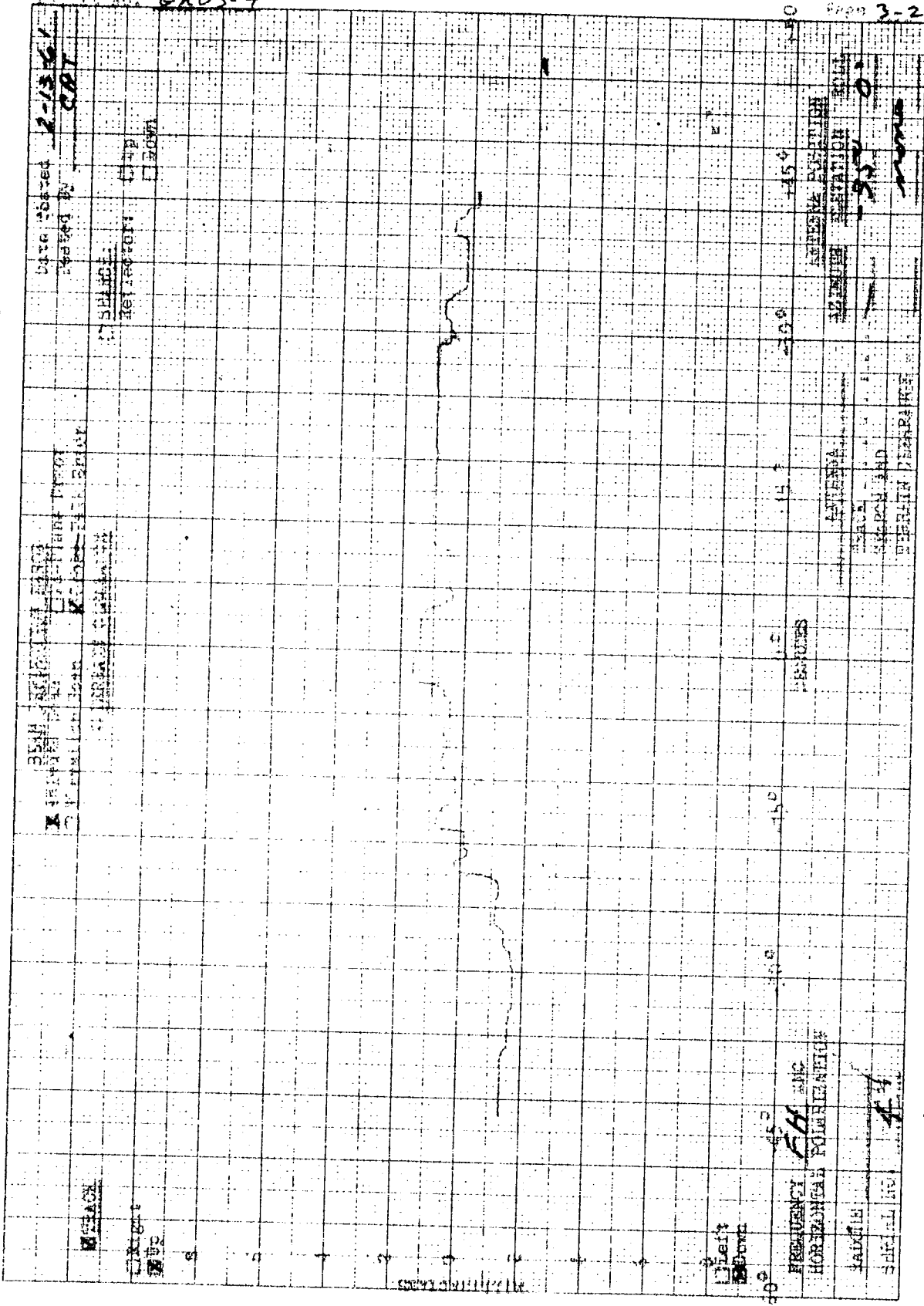
FOZLAGE

2270

100

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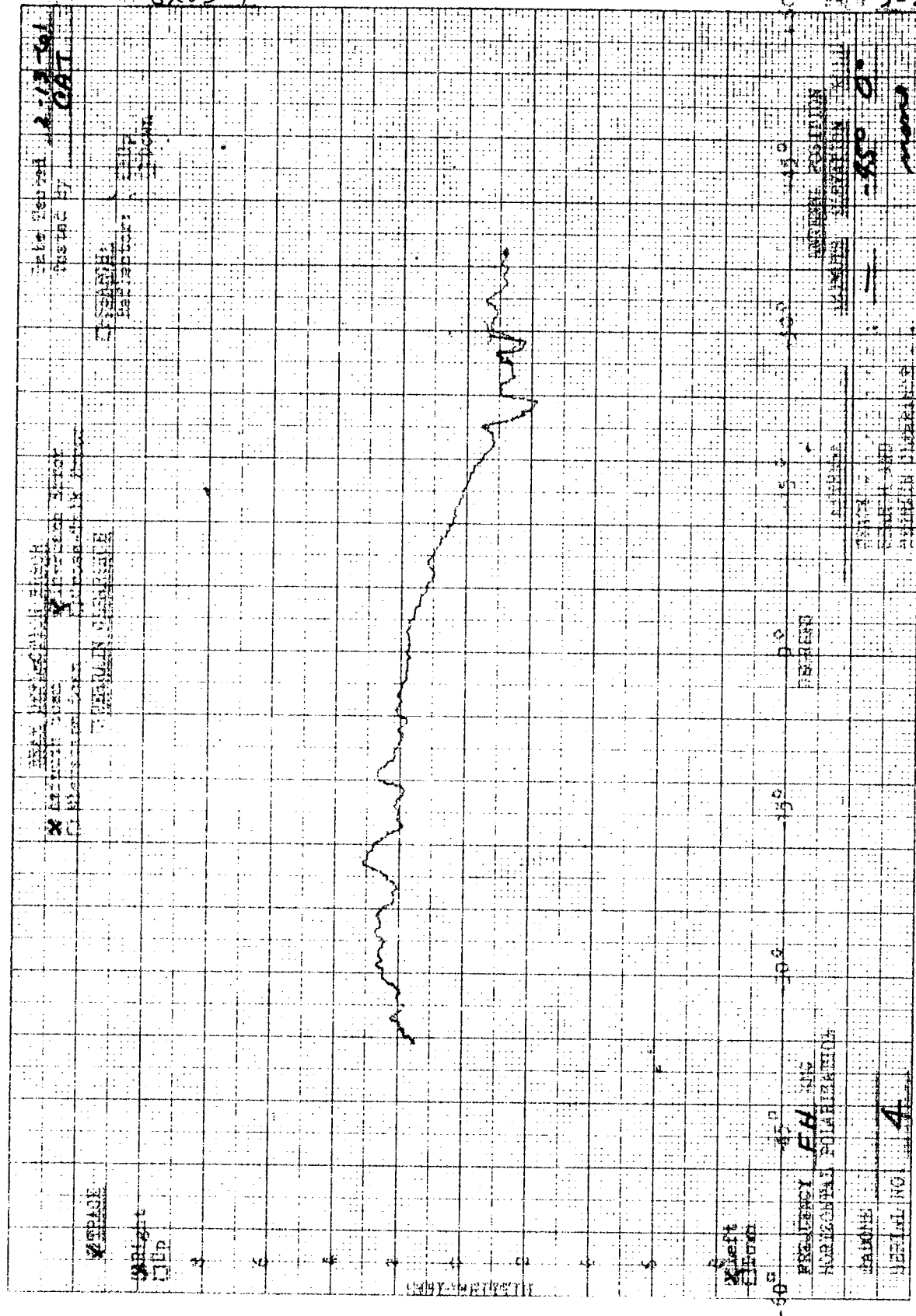




Date tested **2-13-61**
 Tested by **CRJ**

Source ☐ Reflected ☐
 Reflected ☐ **DOWN**

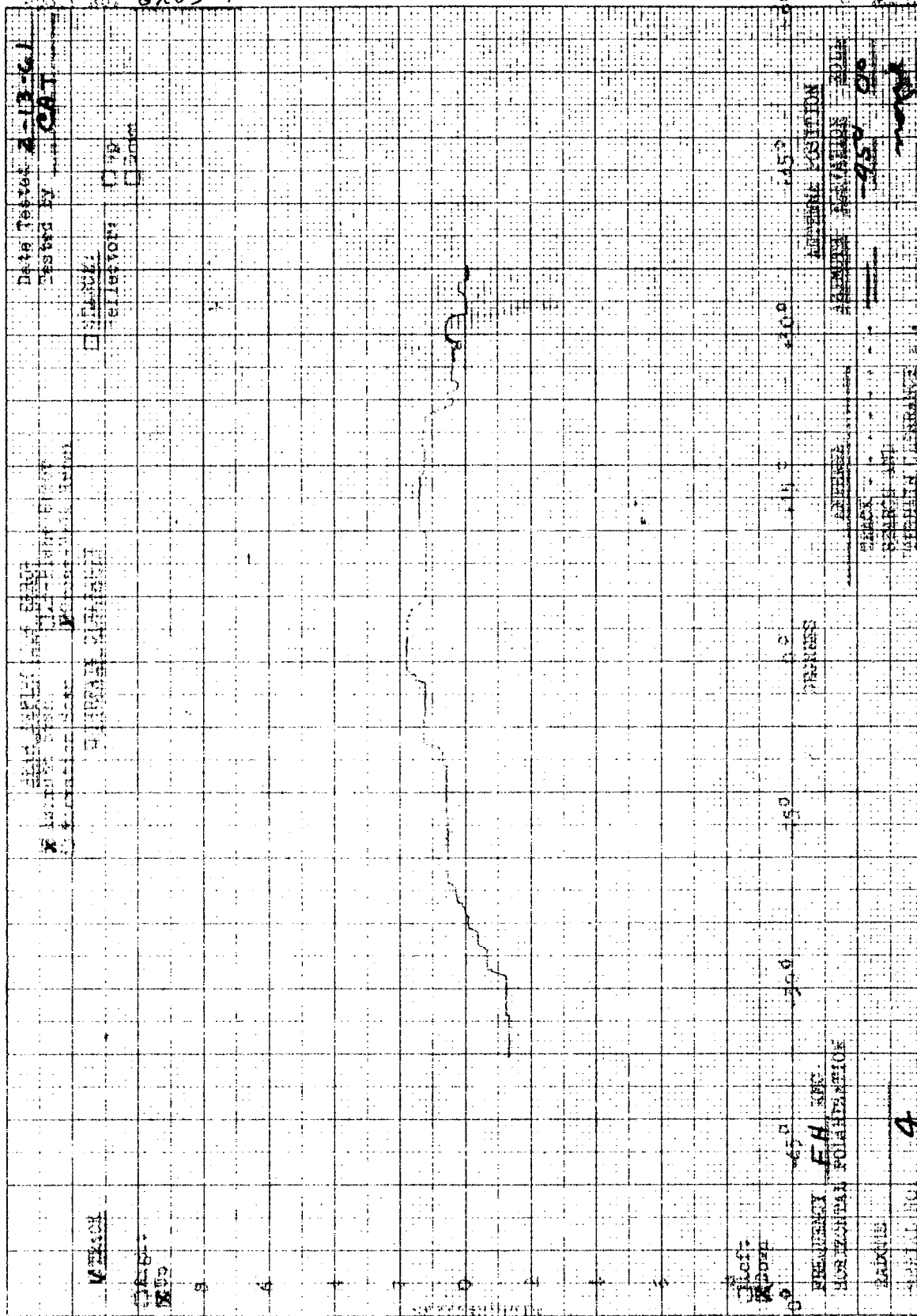
ANTENNA POSITION
 ANTENNA ELEVATION **15°**
 ANTENNA BEARING **195°**
 SERIAL NO. **44**
 DATE **2-13-61**



100 110

GRU3-4

3-23



Date Test 2-11-61
Tested by C.A.L.

VOLTAGE

100
50
0

5

4

3

2

1

0

1

2

100
50
0

FREQUENCY
HORIZONTAL POSITION

100

50

100

50

0

100

50

100

50

0

100

50

100

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0

100

50

100

50

0

100

50

SECTION 50
TRACK FORESIGHT ERROR
 $F_H @ -15^\circ$ ROLL

10-10-61 10:00 AM 30-10-10

BEAM DEFLECTION ERROR <input checked="" type="checkbox"/> Main-Plane Error <input type="checkbox"/> Elevation Scan <input type="checkbox"/> Cross-Talk Error <input type="checkbox"/> TEARAIN CLEARANCE		Date Tested <u>3-3-61</u> Tested By <u>W. S. S.</u>	Report No. <u>GRU3-V</u>
REFLECTOR: <input type="checkbox"/> Up <input type="checkbox"/> Down SEARCH: <input type="checkbox"/> Up <input type="checkbox"/> Down			
TRACK <input checked="" type="checkbox"/> Left <input type="checkbox"/> Down 8 6 4 2 0 2 4 6		ANTENNA POSITION ANTENNA ELEVATION <u>80</u> AZIMUTH <u>-25</u> TRACK <u>80</u> CLEARANCE AND GROUND CLEARANCE <u>None</u>	
FREQUENCY <u>7.4</u> MHz HORIZONTAL POLARIZATION RADONE <u>128B10005-3</u> SERIAL NO. <u>4</u>		ANTENNA TRACK <u>80</u> CLEARANCE AND GROUND CLEARANCE <u>None</u>	

No RADOME

GRV3-4

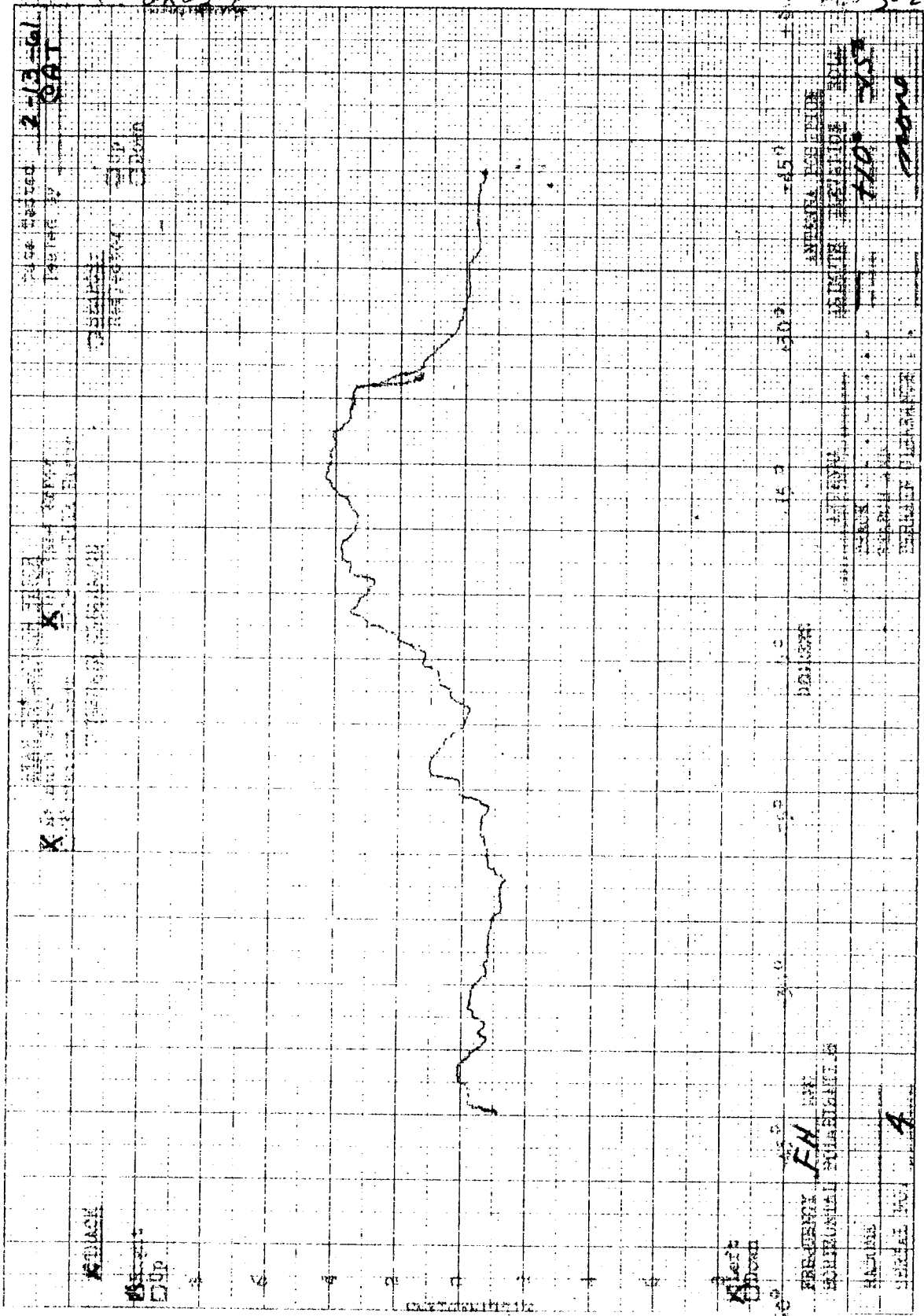
PLAN INFORMATION SECTION		Date Tested	3-3-61
<input checked="" type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error <input type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error		Tested by	W. H. R. S.
<input type="checkbox"/> TRACK <input type="checkbox"/> EIGHT <input type="checkbox"/> GROUP		<input type="checkbox"/> SEASIDE <input type="checkbox"/> COLLECTOR: LUP <input type="checkbox"/> LLOWO	
FREQUENCY 74 KMC HORIZONTAL POLARIZATION RANGE 1200/1000-5-3 SHIELD NO. 4		DEGREES -50° -30° -15° 0° +15° +30° +45° +60°	ANTENNA POSITION ANTENNA ELEVATION ANTENNA ELEVATION ANTENNA ELEVATION
TRACK AND TERRAIN CLEARANCE		0° -15°	3-3-61

No. Radoms

The graph displays a signal trace on a grid. The vertical axis is labeled 'FREQUENCY FA kHz' and 'HORIZONTAL POLARIZATION'. The horizontal axis is labeled 'ANGLE' with markings at 0°, 30°, 45°, 15°, 30°, 45°. The trace shows a series of peaks and troughs, with a prominent peak around 30° and a trough around 45°. The signal is labeled 'X TRACK' and 'X ANTENNA POSITION'.

GR03-4

3-29



GR03-4

GR03-4

GR03-4

GR03-4

GR03-4

[illegible]

Page 3-31

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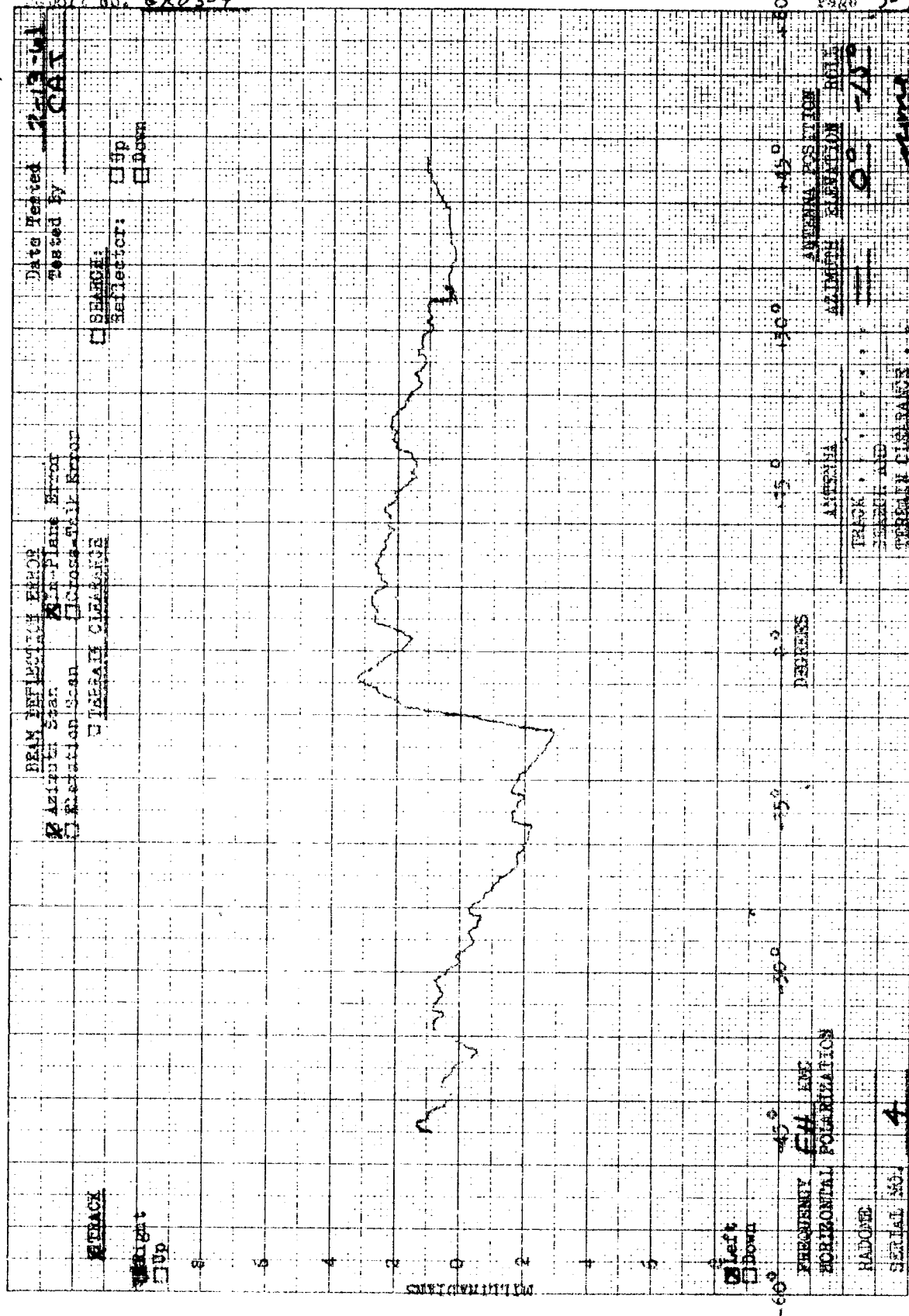
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100-100-100-100-100

GRU 3-4

Page 3-36

BEAM DETECTION REPORT

Altitude Scan ☒ Elevation Scan ☒ Cross-Talk Error

SEARCH: ☐ Reflector: ☐ ☐ Up ☐ Down

DATE: 2-13-67

TESTED BY: CBT

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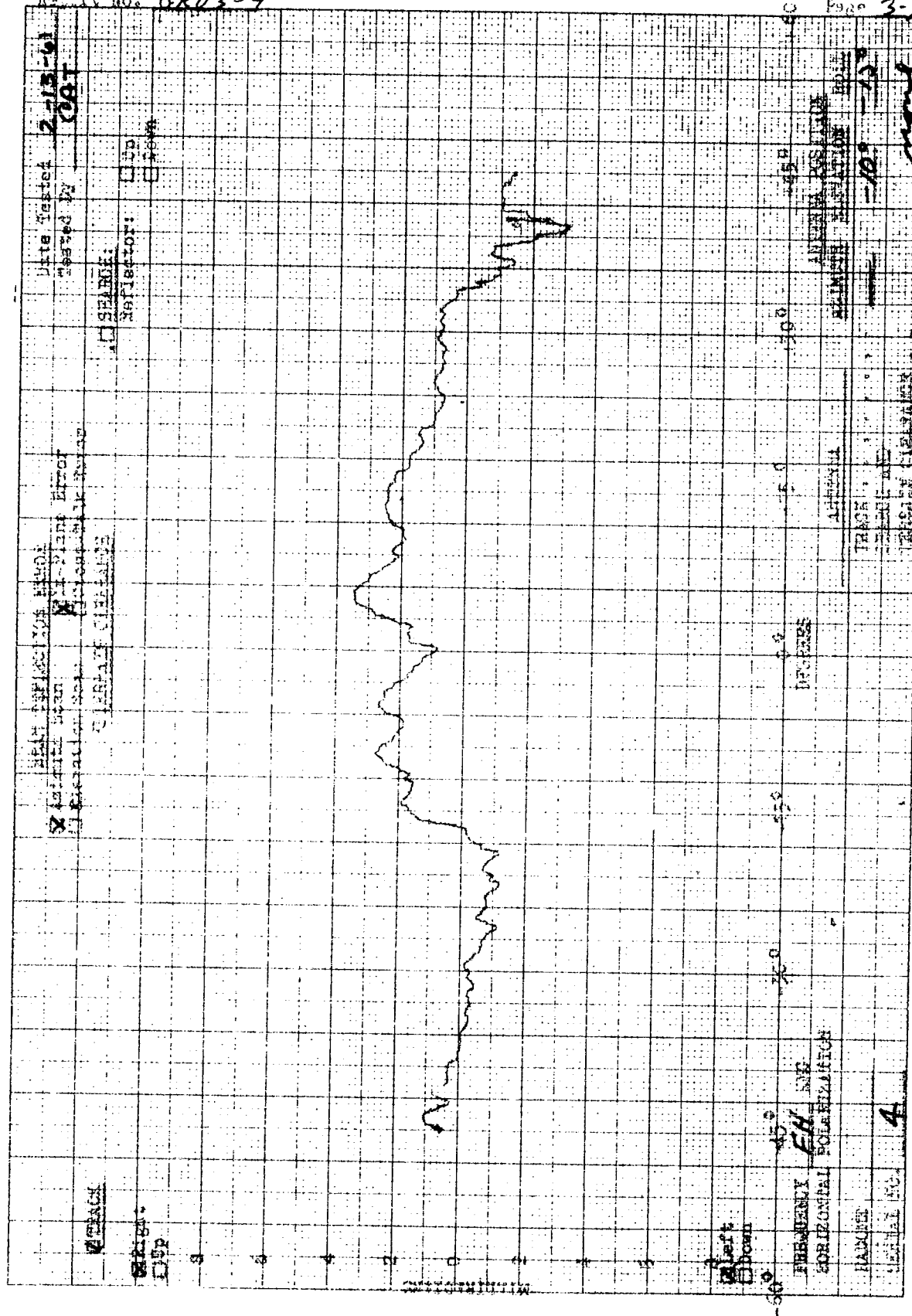
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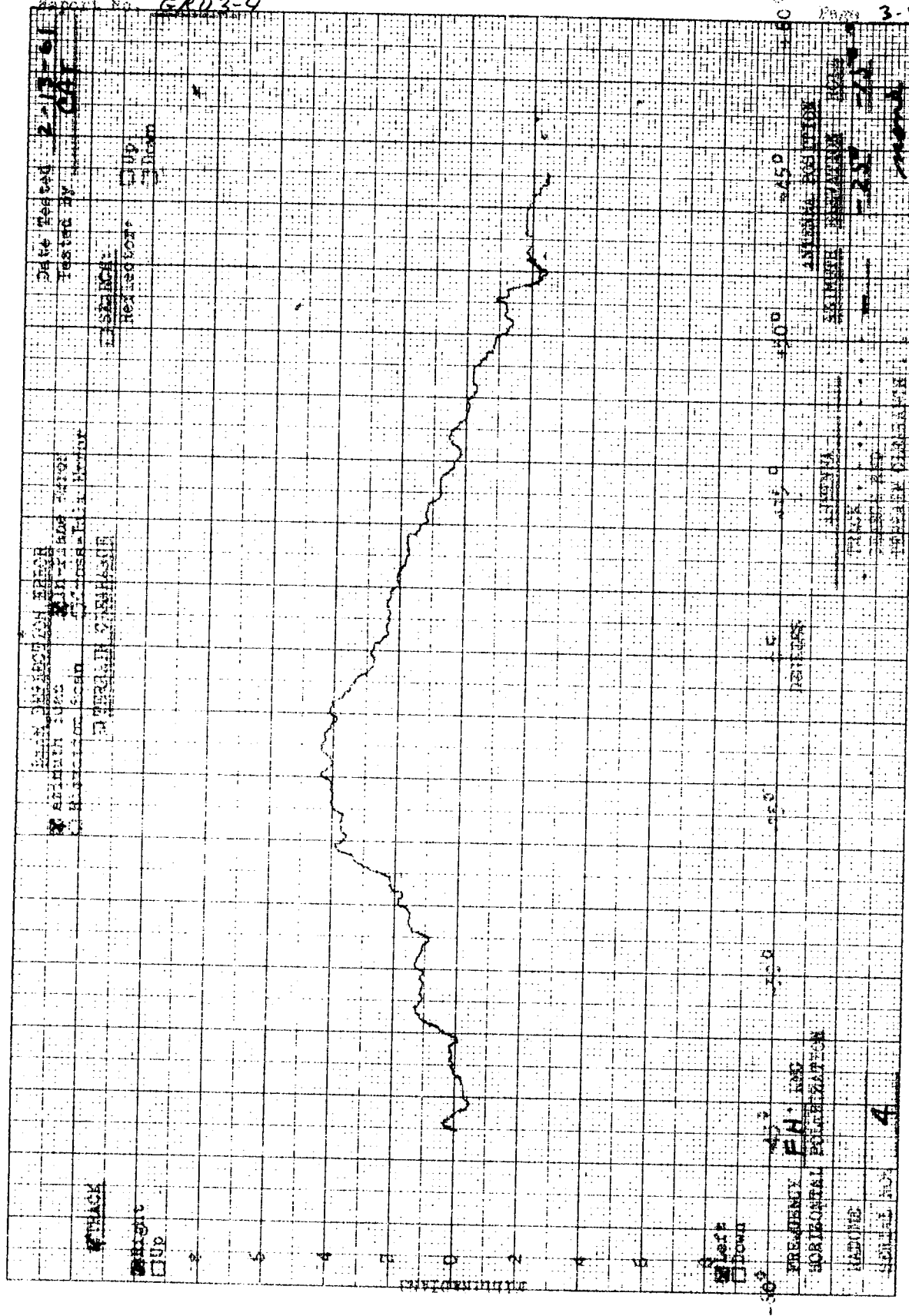
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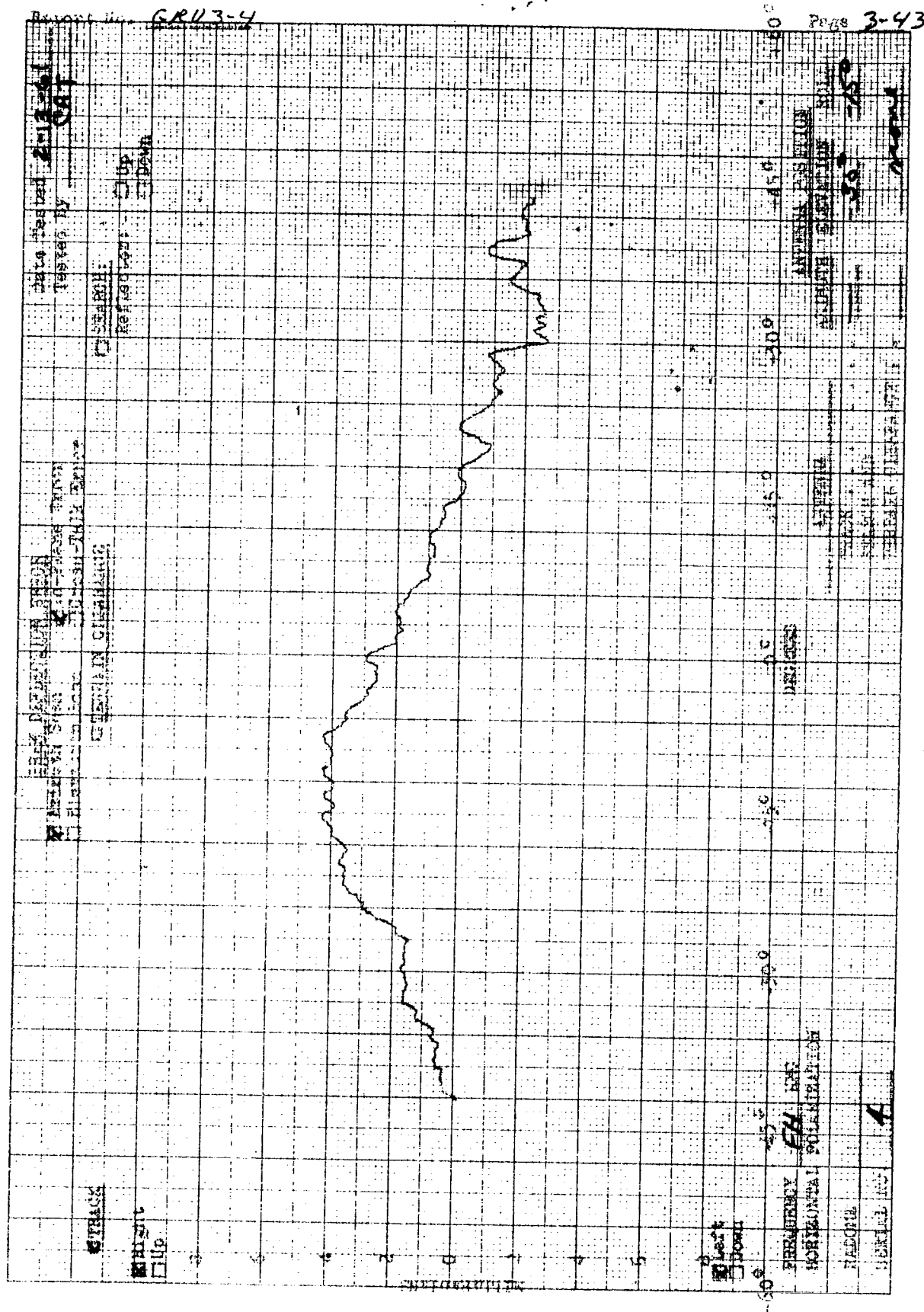
DATA TESTED 2-13-67
 TESTED BY CAT
 SWITCH: ☐ 1500
 REFLECTOR: ☐ 1500

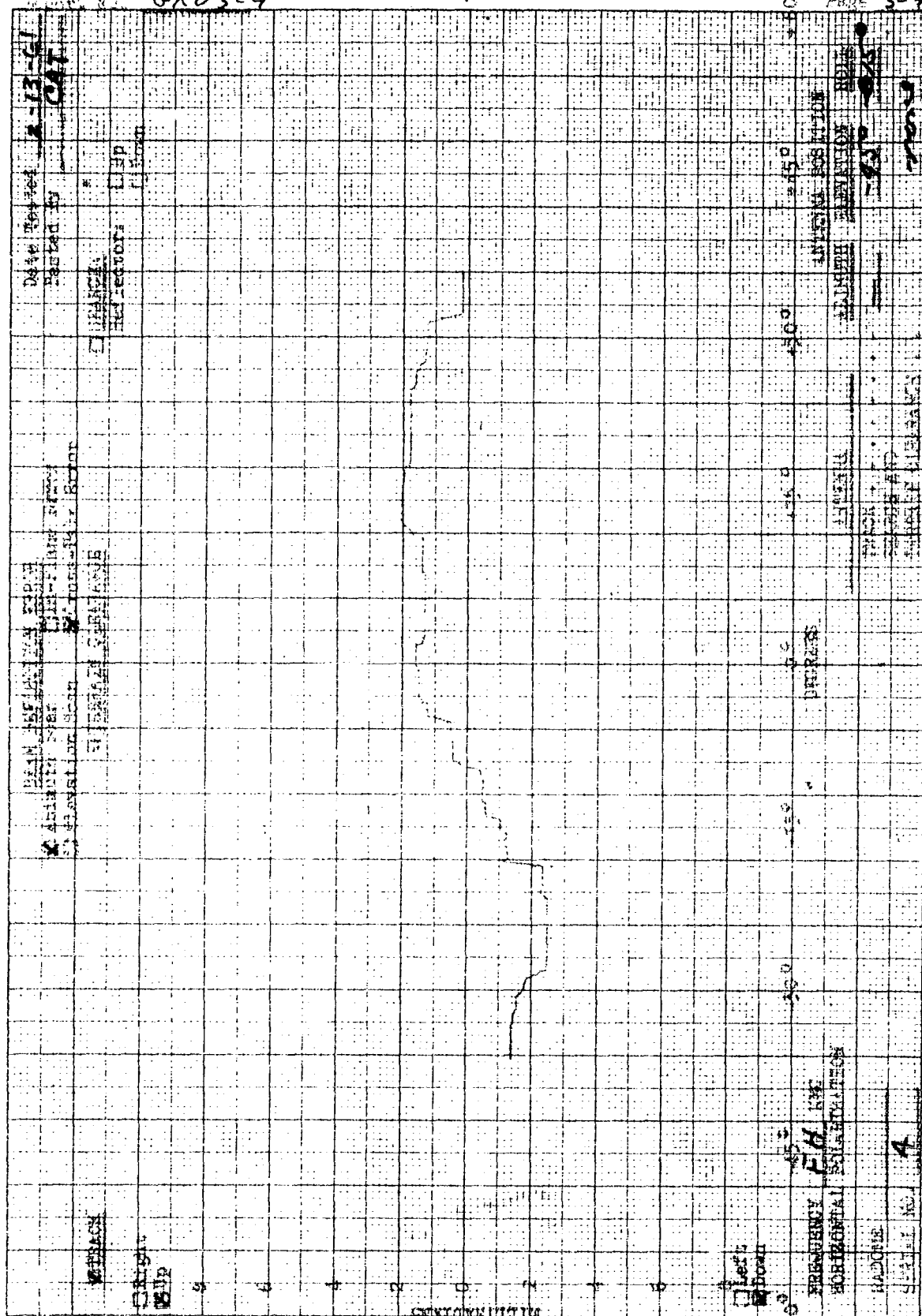
BEAM DEVIATION ERROR
☒ 1500-Plane Error
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☐ 1500-Plane Error

FREQUENCY 1.414 MHz
 HORIZONTAL POLARIZATION
 RADAR 4

REFLECTOR 4

10X10 PHOTO DRUM LENS 350-110
 REFLECTION 10





SECTION 31

TRACK BORELIGHT ERROR

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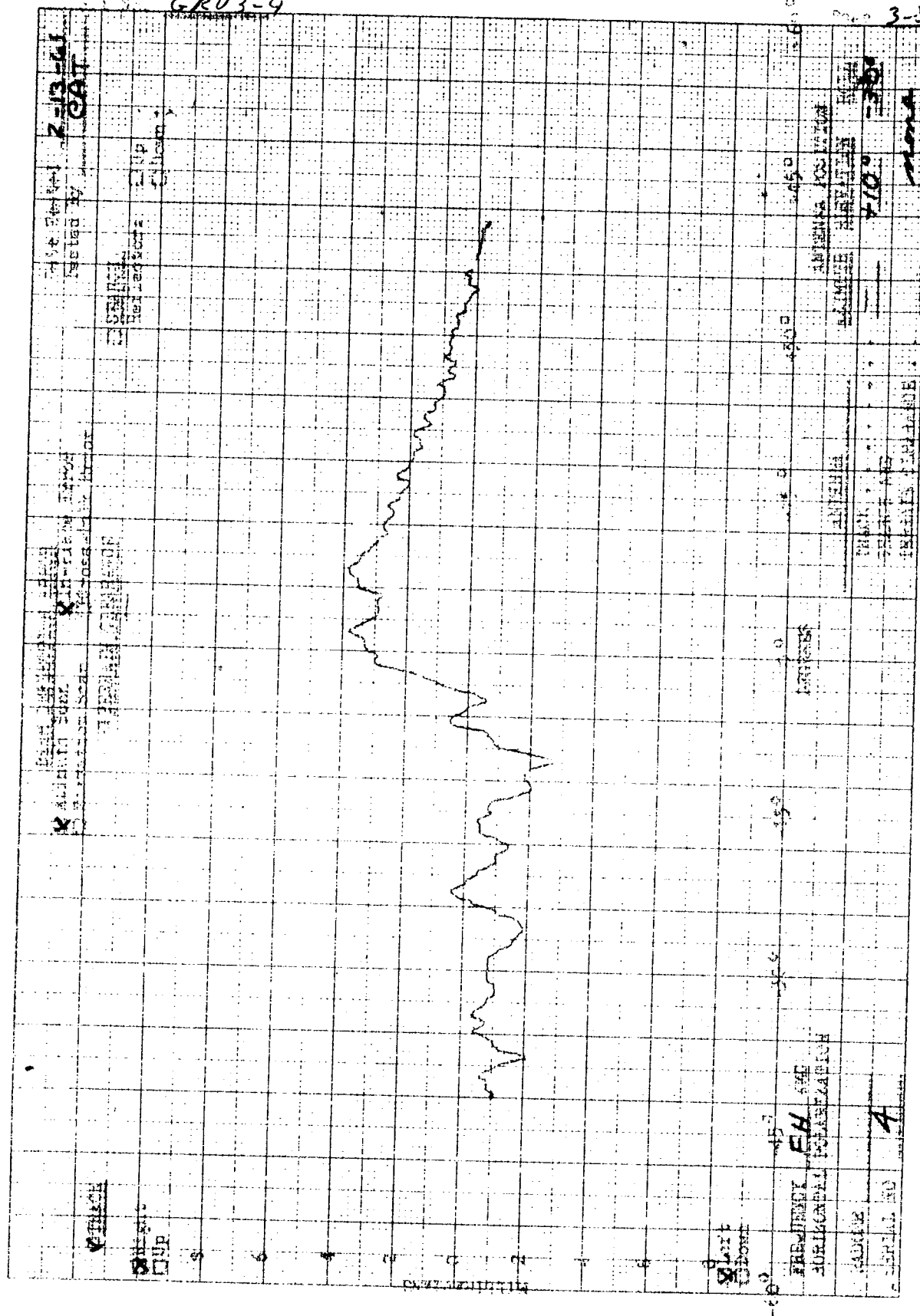
359-116

TRACK <input type="checkbox"/> Left <input type="checkbox"/> Down		FREQUENCY 45° HORIZONTAL POLARIZATION REFLECTOR 12881005-3 SERIAL NO. 4		-60° -30° -15° 0° 15° 45° 60° DEGREES		ANTENNA POSITION ELEVATION 0° ROLL 120°		DATE TESTED 3-3-67 TESTED BY 2003-5	
BEAK DEFLECTION ERROR <input checked="" type="checkbox"/> In-Frame Error <input type="checkbox"/> Elevation Scan <input type="checkbox"/> Cross-Talk Error <input type="checkbox"/> TERRAIN CLEARANCE		SEARCH <input type="checkbox"/> Up <input type="checkbox"/> Down		REFLECTOR <input type="checkbox"/> Up <input type="checkbox"/> Down		REFLECTOR <input type="checkbox"/> Up <input type="checkbox"/> Down		REFLECTOR <input type="checkbox"/> Up <input type="checkbox"/> Down	

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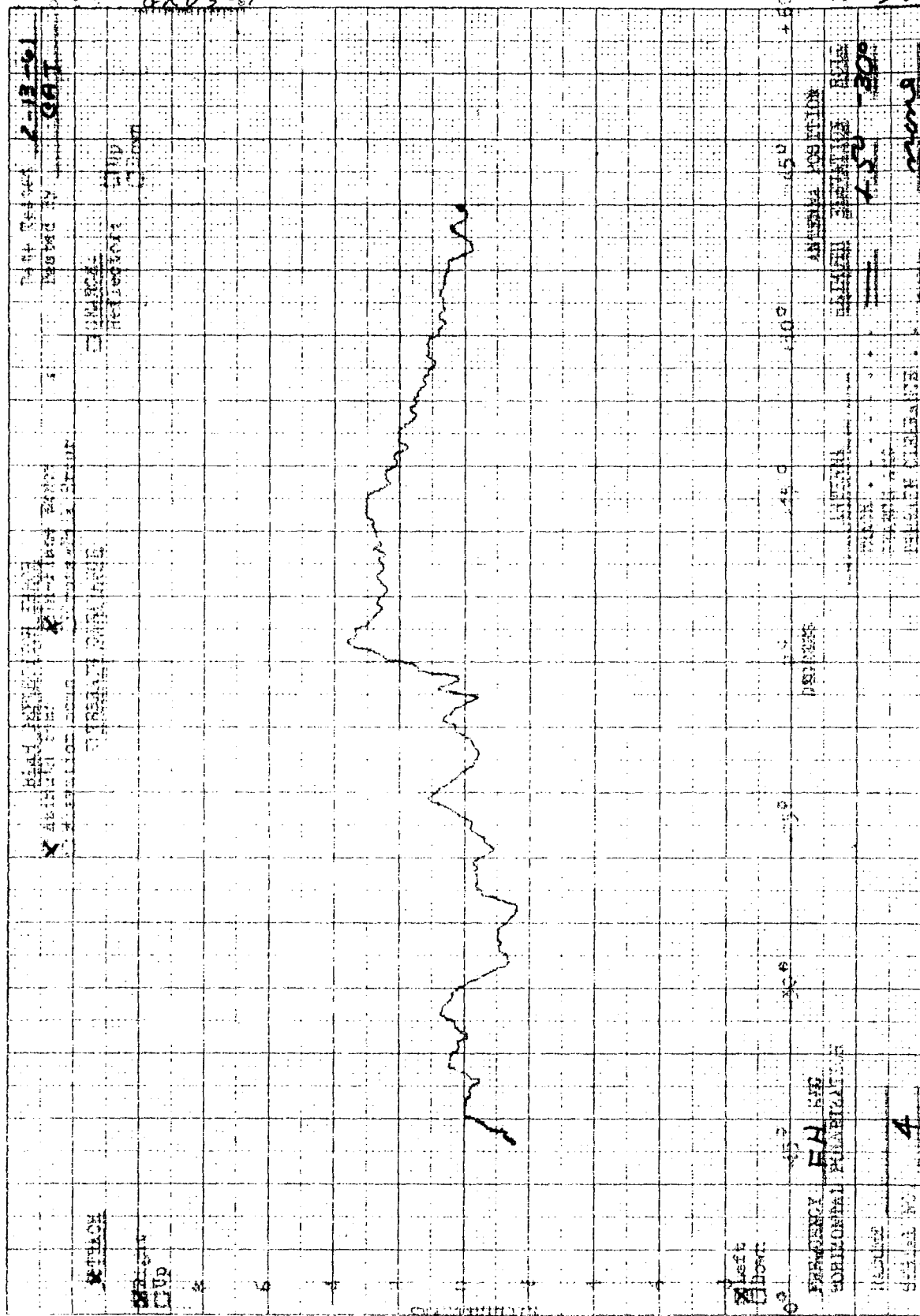
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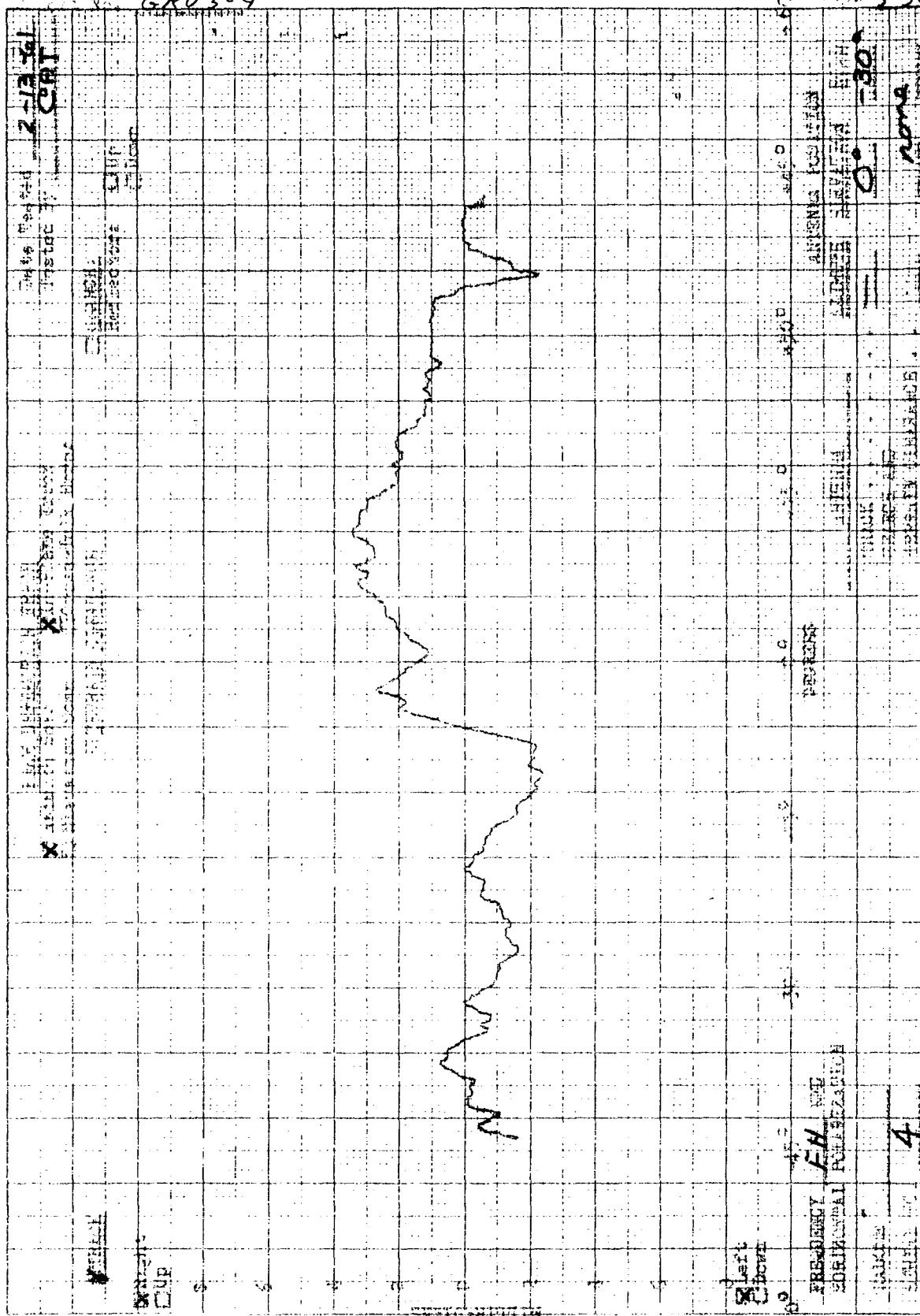
MAY INFORMATION REPORT <input checked="" type="checkbox"/> INFORMATION REPORT <input type="checkbox"/> INFORMATION REPORT		Date: 2-13-61 Tested By: CAT	
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GRU3-4

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DATE	11-11-61
TIME	11:00
LOCATION	11-11-61
REMARKS	11-11-61
INITIALS	11-11-61
SIGNATURE	11-11-61
DATE	11-11-61
TIME	11:00
LOCATION	11-11-61
REMARKS	11-11-61
INITIALS	11-11-61
SIGNATURE	11-11-61

GRU3-4

15

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[illegible]

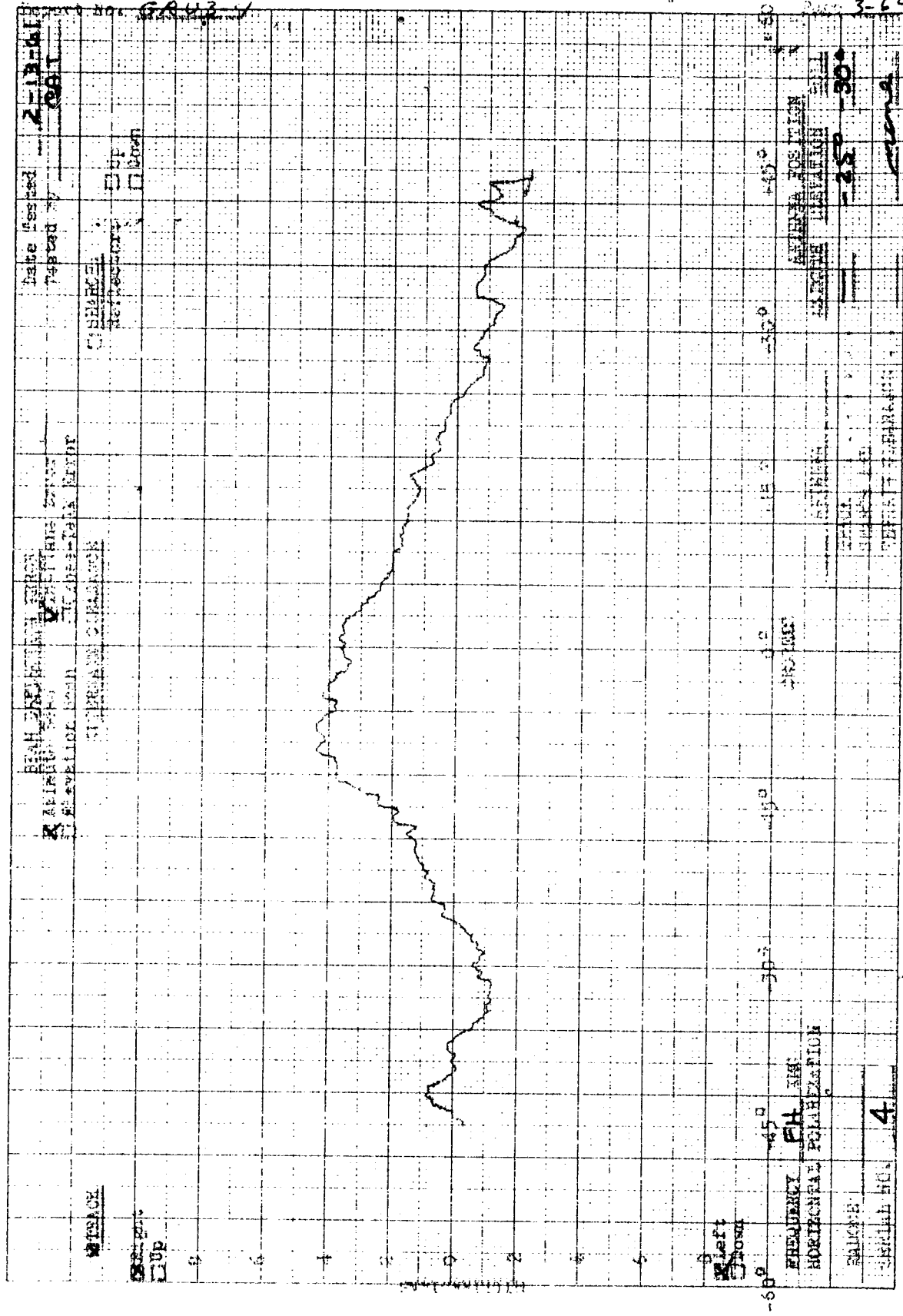
1950

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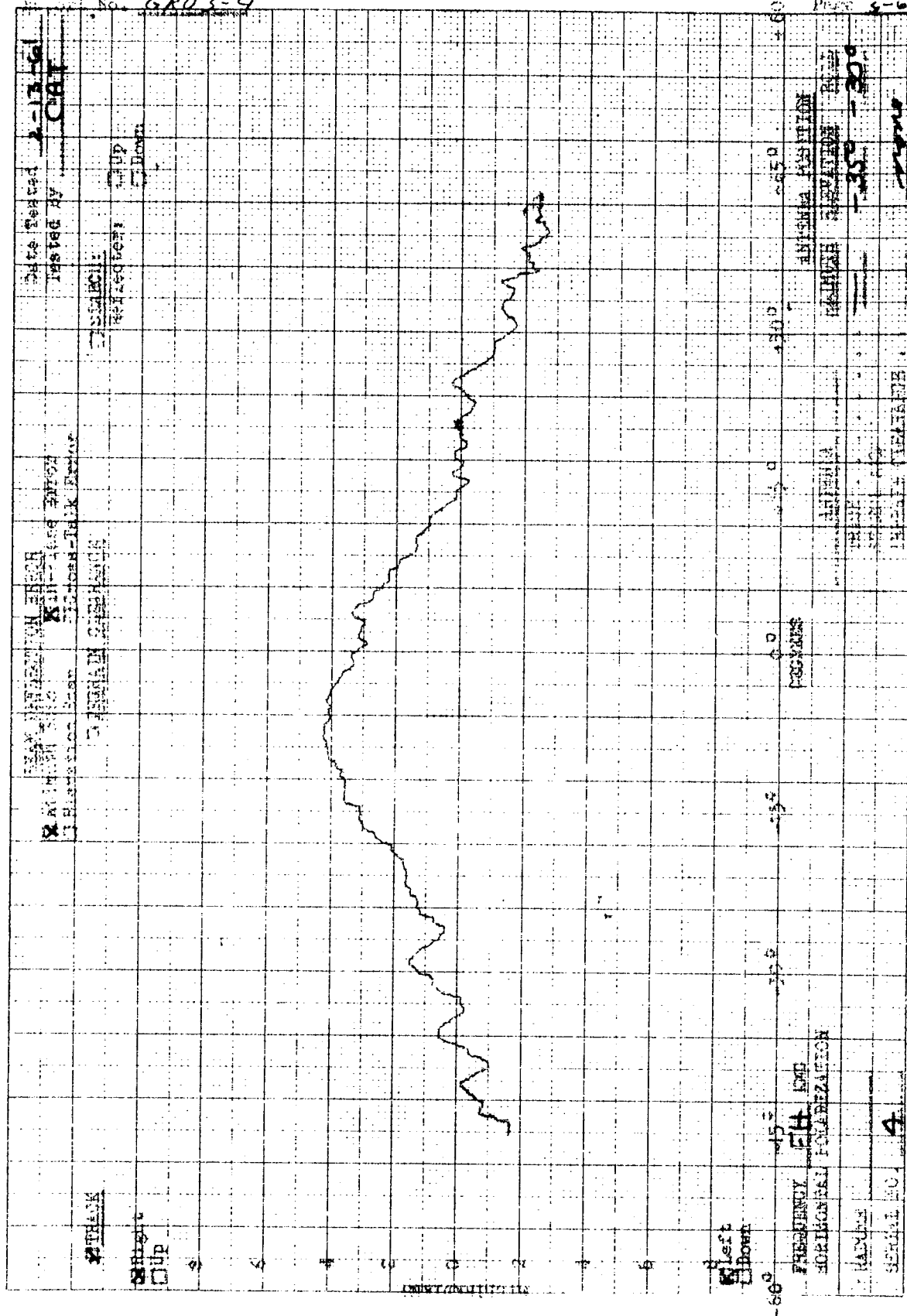
2000

4

[illegible]



[illegible]



[illegible]

TRACK
 Left
 Right
 Up
 Down

Date Tested: 2-12-61
 Tested By: OAT

REFLECTION: ☐ Up ☐ Down

FREQUENCY: 45° 150° 200° 250° 300° 350° 400° 450° 500° 550° 600°

HORIZONTAL POLARIZATION: 45° 150° 200° 250° 300° 350° 400° 450° 500° 550° 600°

RADOME: 45° 150° 200° 250° 300° 350° 400° 450° 500° 550° 600°

SERIAL NO.: 4

SECTION 32

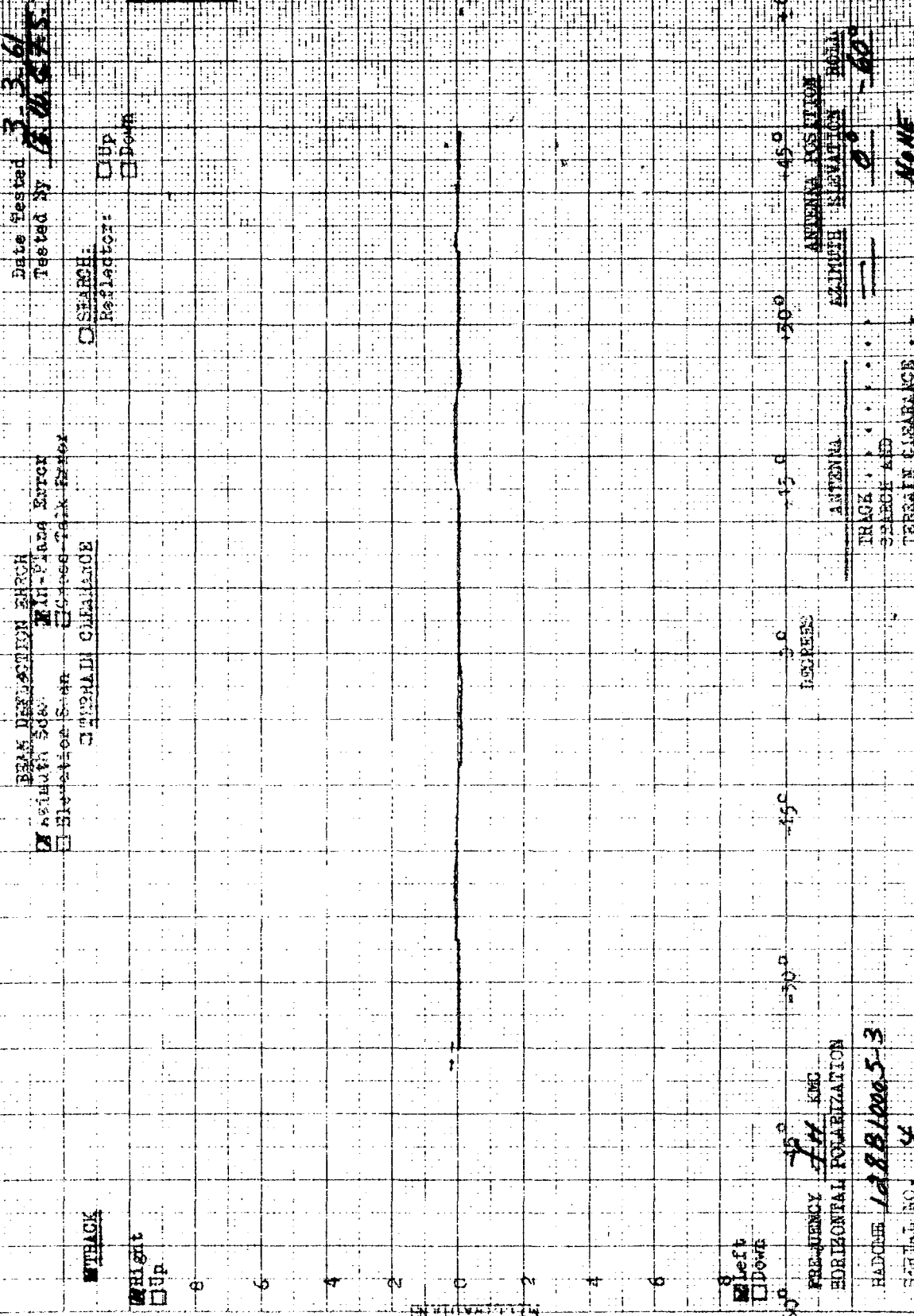
TRACK BORING-HIT ERROR

$F_H @ -60^{\circ}$ ROLL

THE BRUNSWICK-BALKE-COLLENDER COMPANY

Report No. GR03-4

Page 3-71



Date Tested 3-3-61
Tested By GR03-4

BEAM DEFLECTION SEARCH
☒ Azimuth Scan ☒ Elevation Scan
☒ High-Peak Search ☒ Cross-Talk Search
☒ Minimum Clearance

SEARCH

Reflector: ☒ Up ☒ Down

WTRACK

☒ Right ☐ Up

☒ Left ☐ Down

FREQUENCY 7.4 KMC
HORIZONTAL POLARIZATION

HADOME 128810005-3

SERIAL NO. 4

DEGREES

ANTENNA

TRACK
SEARCH AND
TERRAIN CLEARANCE

ANTENNA POSITION

AZIMUTH ELEVATION

0° 0°

NONE

No RADOME

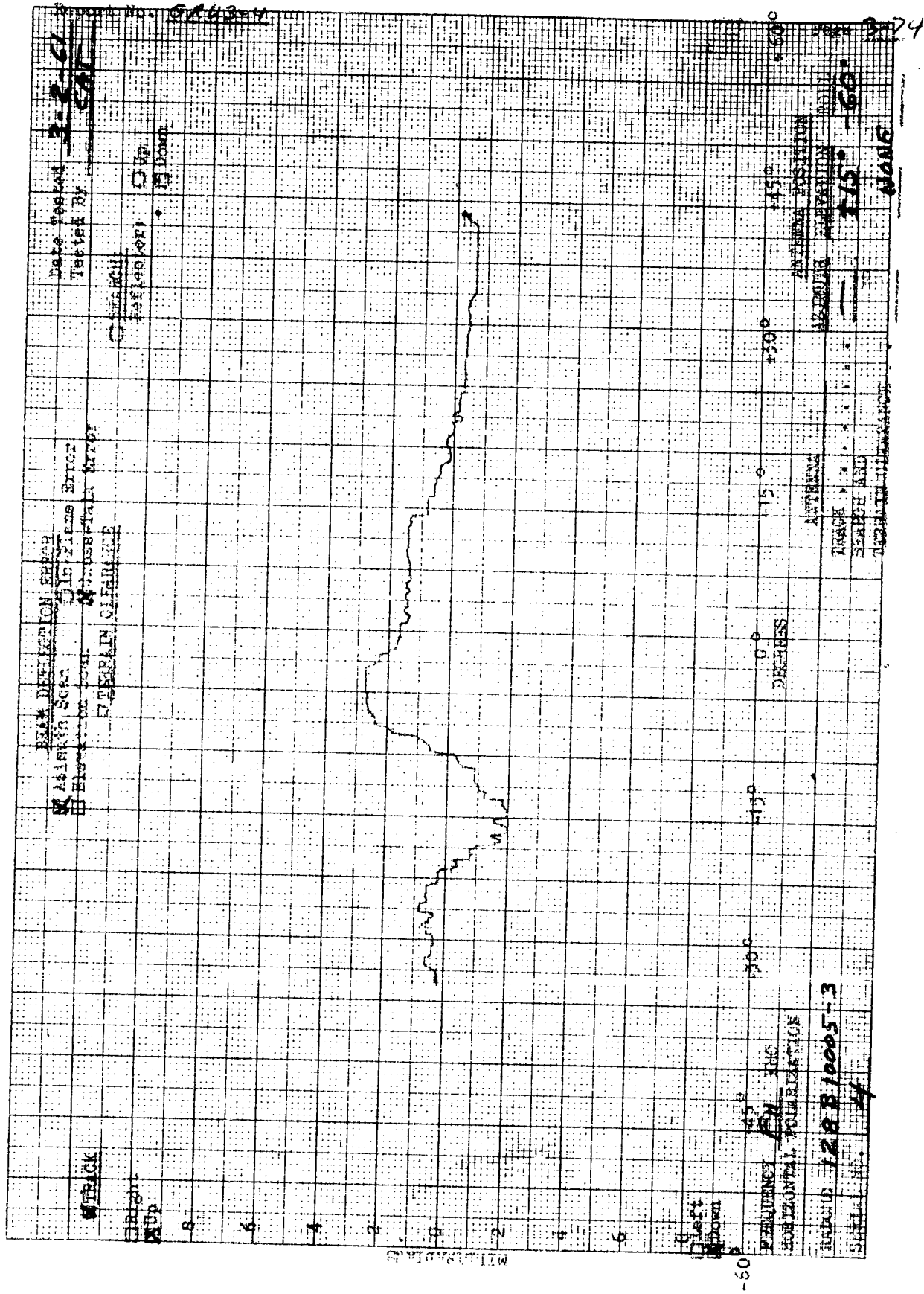
2000

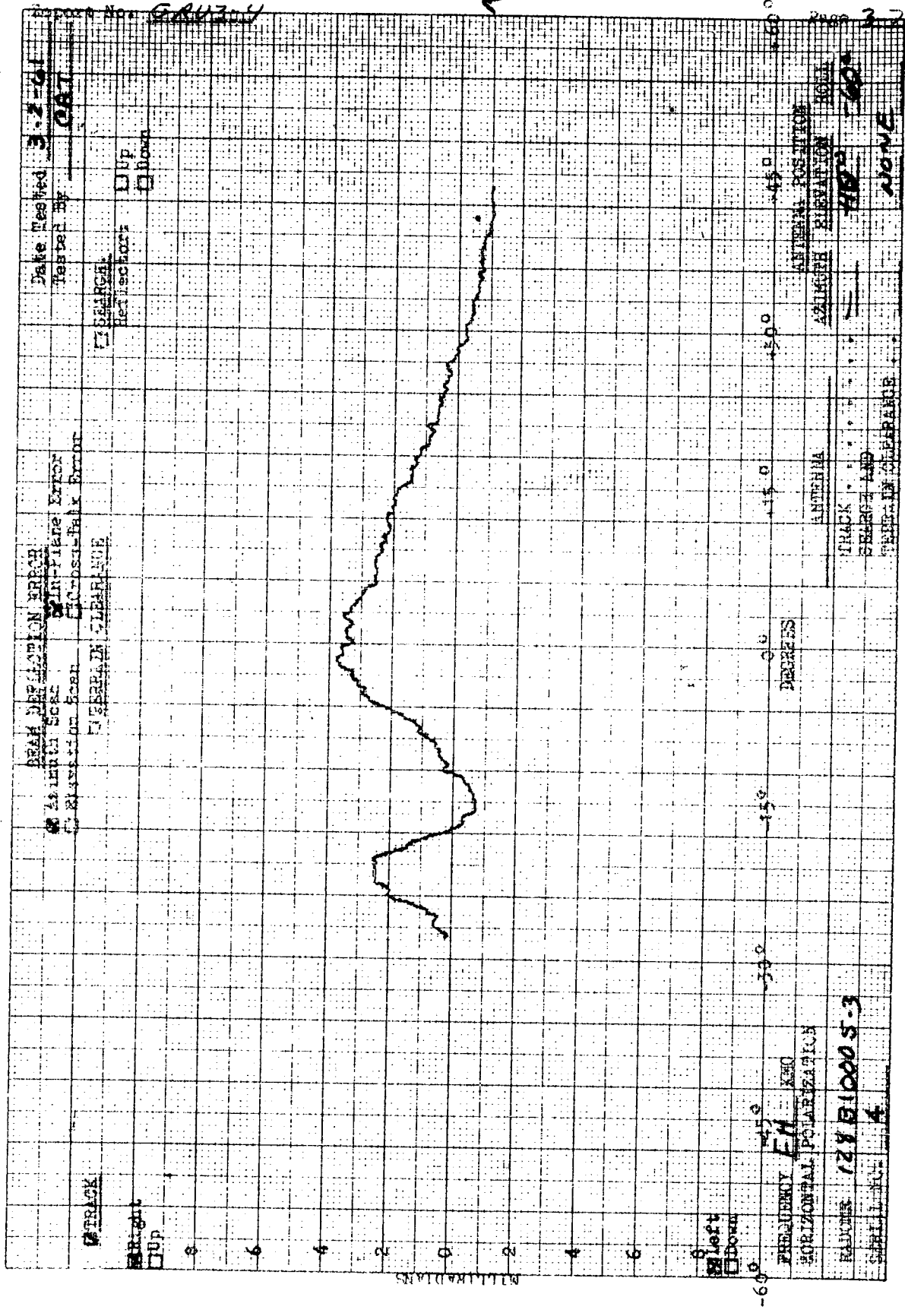
[illegible]

No Room

[illegible]

350.110





Date Tested **3-2-61**

Tested By **QAT**

SEARCH ☒ SEARCH ☐ REFLECTOR ☐ UP ☐ DOWN

BEAM DEVIATION ERROR

Minimum Error **1.0** Min-Plane Error

Maximum Error **1.0** Cross-Plane Error

MINIMUM CLEARANCE

TRACK

Left ☒ Right ☐ Up ☐ Down ☐

Left ☒ Right ☐ Up ☐ Down ☐

FREQUENCY **FM** XEO

HORIZONTAL POLARIZATION

RASTER **128 B1000 S-3**

STABILITY **A**

DEGREES

ANTENNA

ANTENNA POSITION

AZIMUTH ELEVATION

TRACK **128 B1000 S-3**

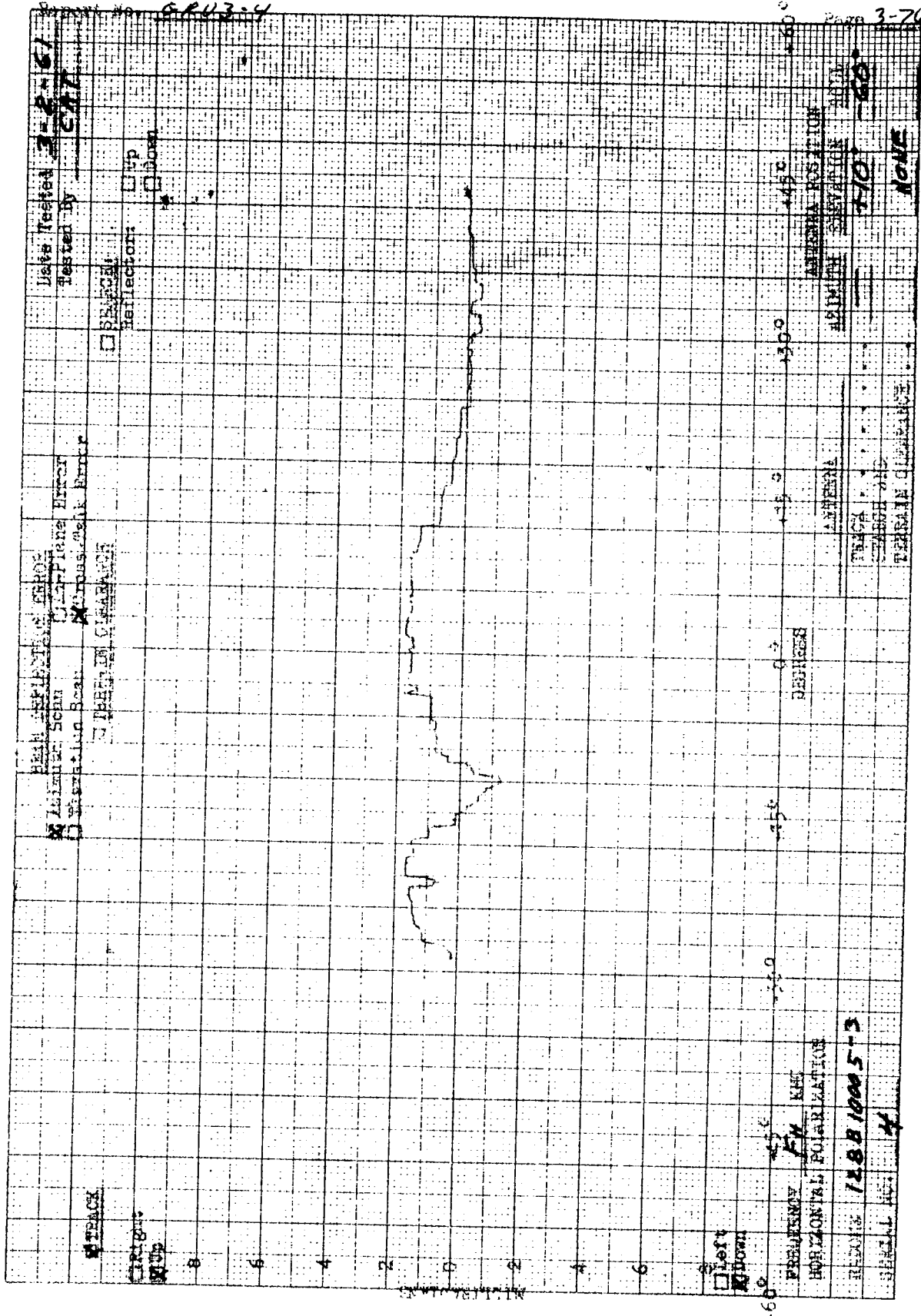
STABILITY

MINIMUM CLEARANCE

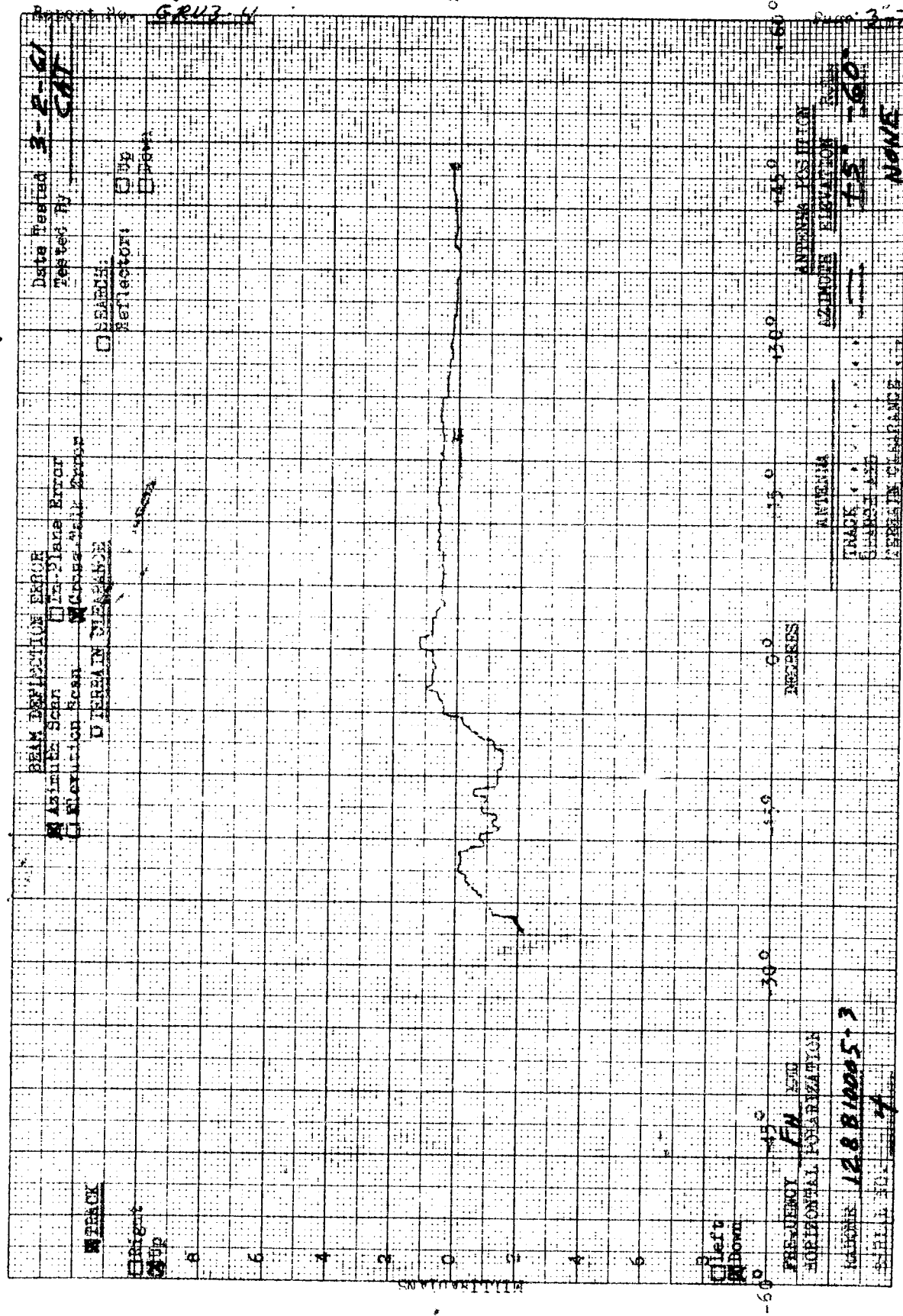
NONE

35

3-27 10X15000 2-10-61 309 110
REV. 1-5-61



10X TO 100X THE 1/2 INCH 359 110



3-80

BEAM DEFLECTION ERROR <input checked="" type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error <input type="checkbox"/> Cross-Talk Error		Date Tested: 3-3-61 Tested by: CMT	
SEARCH <input type="checkbox"/> Reflector: <input type="checkbox"/> Up <input type="checkbox"/> Down			
TRACK <input type="checkbox"/> Right <input type="checkbox"/> Up <input type="checkbox"/> Left <input type="checkbox"/> Down			
FREQUENCY 450 MHz HORIZONTAL POLARIZATION		ANTENNA POSITION AZIMUTH ELEVATION	
RANGE 12881000 S-3 SERIAL NO. 4		TRACK SEARCH AND TRACKING DISTANCE	

10X10 TO BE USED FOR RECORDING

BEAM DEVIATION ERROR <input checked="" type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error <input type="checkbox"/> Cross-Plane Error <input type="checkbox"/> Terrain Clearance		Date Tested: <u>3-2-61</u> Tested by: <u>CAF</u>	
TRACK <input type="checkbox"/> Right <input checked="" type="checkbox"/> Left <input type="checkbox"/> Up <input type="checkbox"/> Down		REFLECTOR: <input type="checkbox"/> Up <input type="checkbox"/> Down	
FREQUENCY <u>FM</u> kHz HORIZONTAL POLARIZATION PHONE <u>128B10005-3</u>		ANTENNA POSITION AZIMUTH <u>145°</u> ELEVATION <u>5°</u> TRACK <u>145°</u> SEARCH <u>145°</u> TERRAIN CLEARANCE <u>NONE</u>	

3-82

BEAM DEFLECTION ERROR

Date Tested **5-2-61**
Tested By **CAT**

☒ In-Plane Error
☐ Cross-Talk Error

☐ Beam Clearance
☐ Reflector's ☐ Up ☐ Down

TRACK
☐ Left ☐ Right
☐ Up ☐ Down

PREVIOUSLY FM K80
HORIZONTAL POLARIZATION

RANGE 1281000S-3
SHELL 10-4

ANTENNA POSITION
AZIMUTH ELEVATION **ROLL**

TRACE
SCALE
STRAIN CLEARANCE

DEGREES

Time (Minutes)	Beam Deflection Error (Millicunts)
0	1
10	4
20	2
30	3
40	2
50	3
60	2
70	3
80	2
90	3
100	2
110	3
120	2
130	3
140	2
150	3

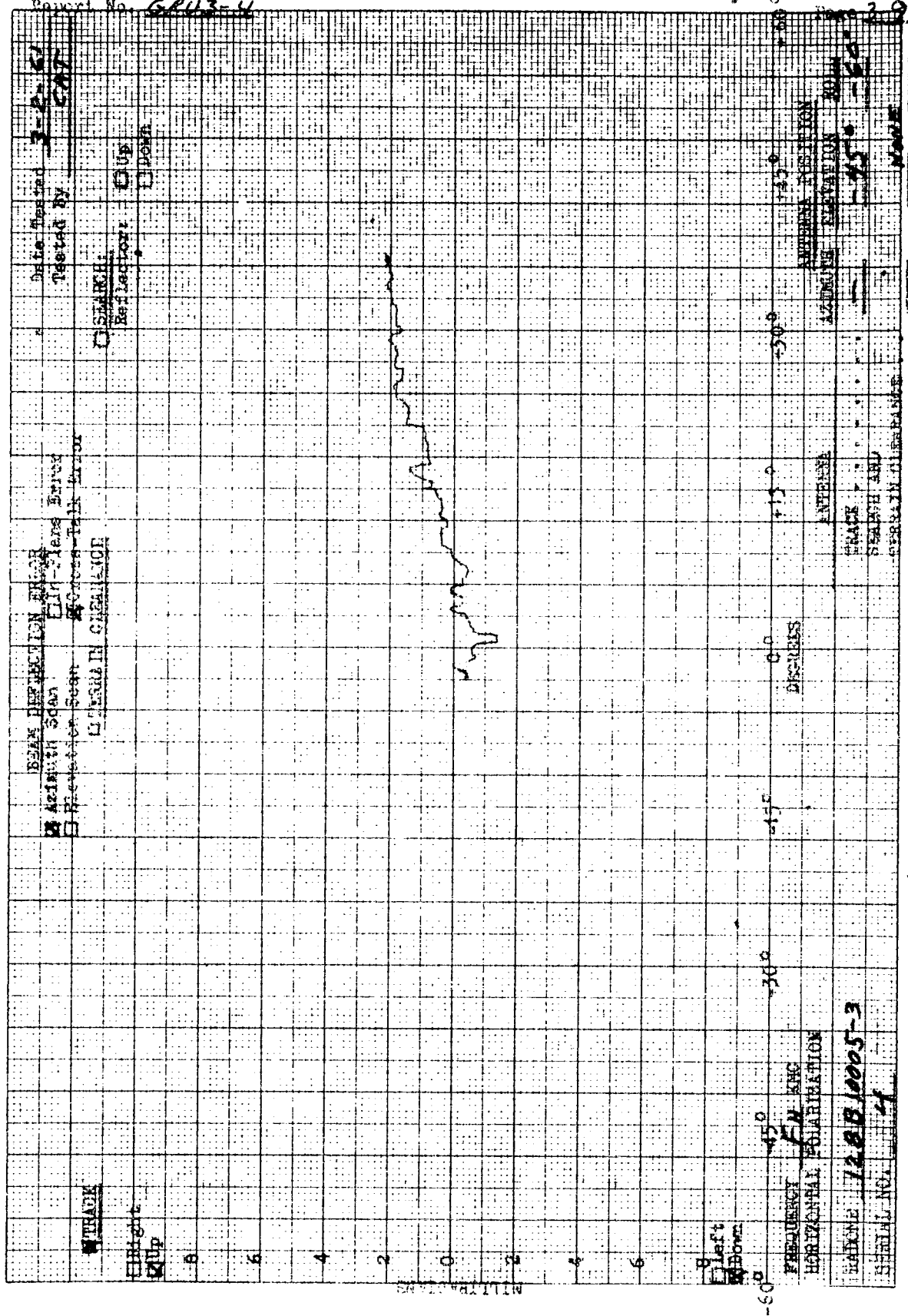
[illegible]

Beam Deflection Error <input checked="" type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error <input type="checkbox"/> Cross-Track Error <input type="checkbox"/> In-Track Error		Date Tested: 3-2-61 Tested By: JAT	
TRACK Straight <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down		Reflector: <input type="checkbox"/> Up <input checked="" type="checkbox"/> Down	
FREQUENCY: 1280.0005-3 HORIZONTAL POLARIZATION		ANTENNA POSITION AZIMUTH: 150° ELEVATION: 15° RANGE: 1000	
RANGE: 1280.0005-3 STATE NO. 4		TRACK SEARCH AND RANGE CALIBRATION: NONE	

[illegible]

10X10 TO 10X10 INCHES
NEWELL-KESLER

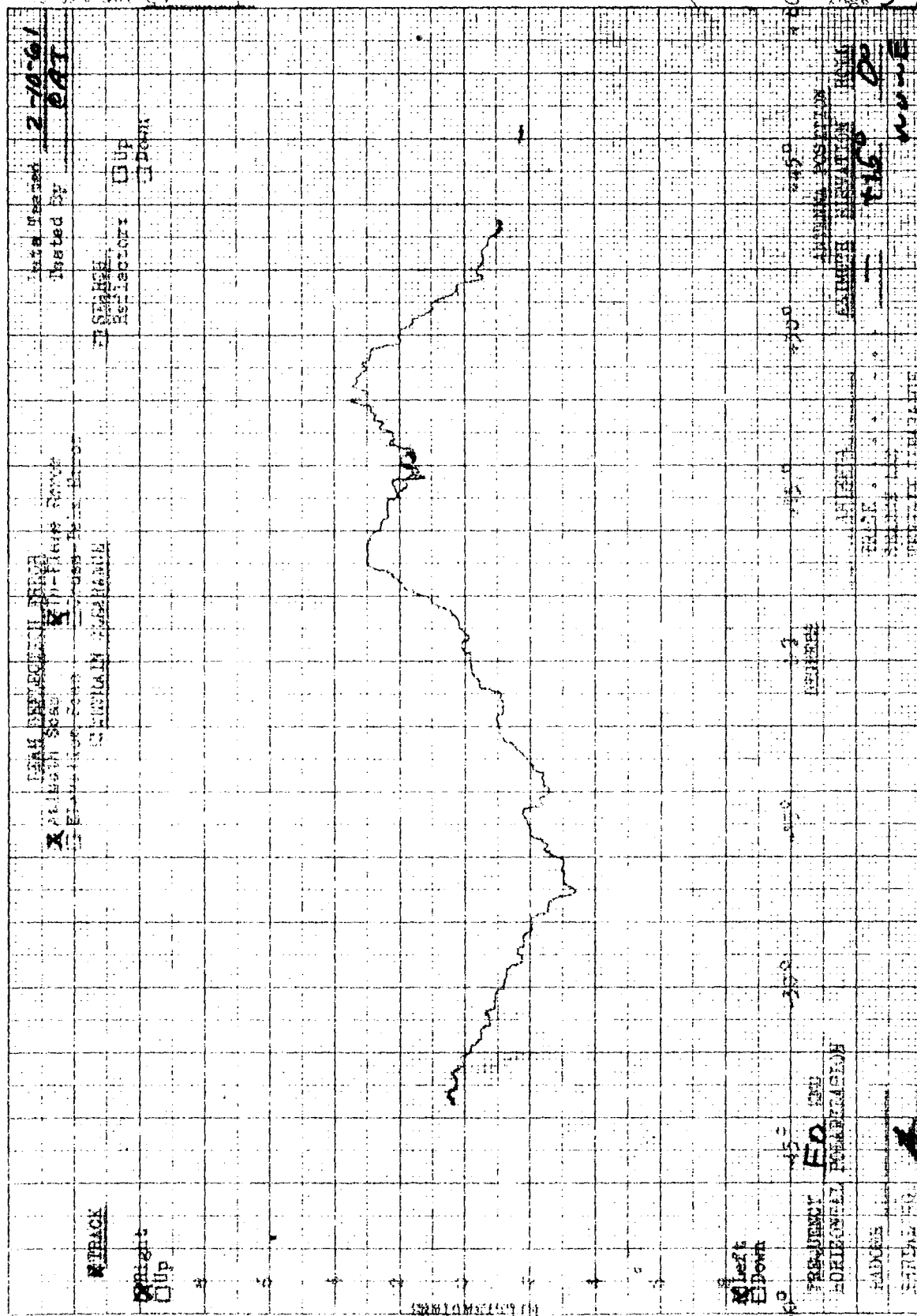
Report No. GRU3-4



SECTION 33

TRACK DORESIGHT ERROR

$F_0 \neq 0^\circ$ ROLL



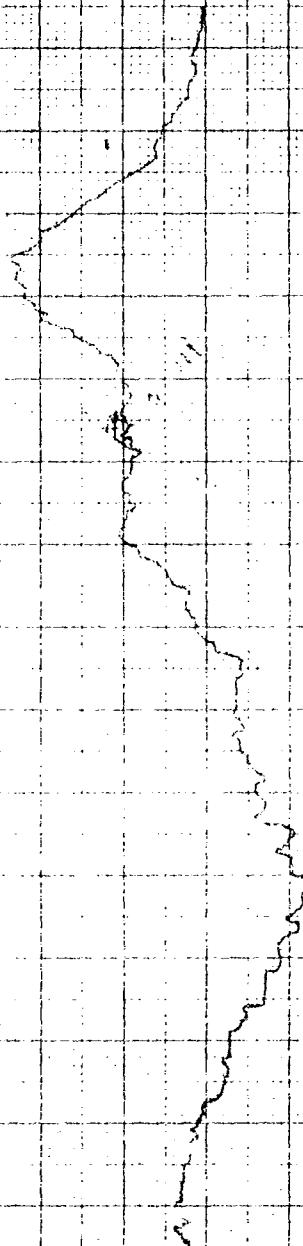
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THE UNIVERSITY OF CHICAGO

Waste Tester 2-10-61
Tested By CPT

三

1930

[illegible]

Left
Right

FOURTH EDITION

1994

10

Children's Health

TABLE

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$E = Q$

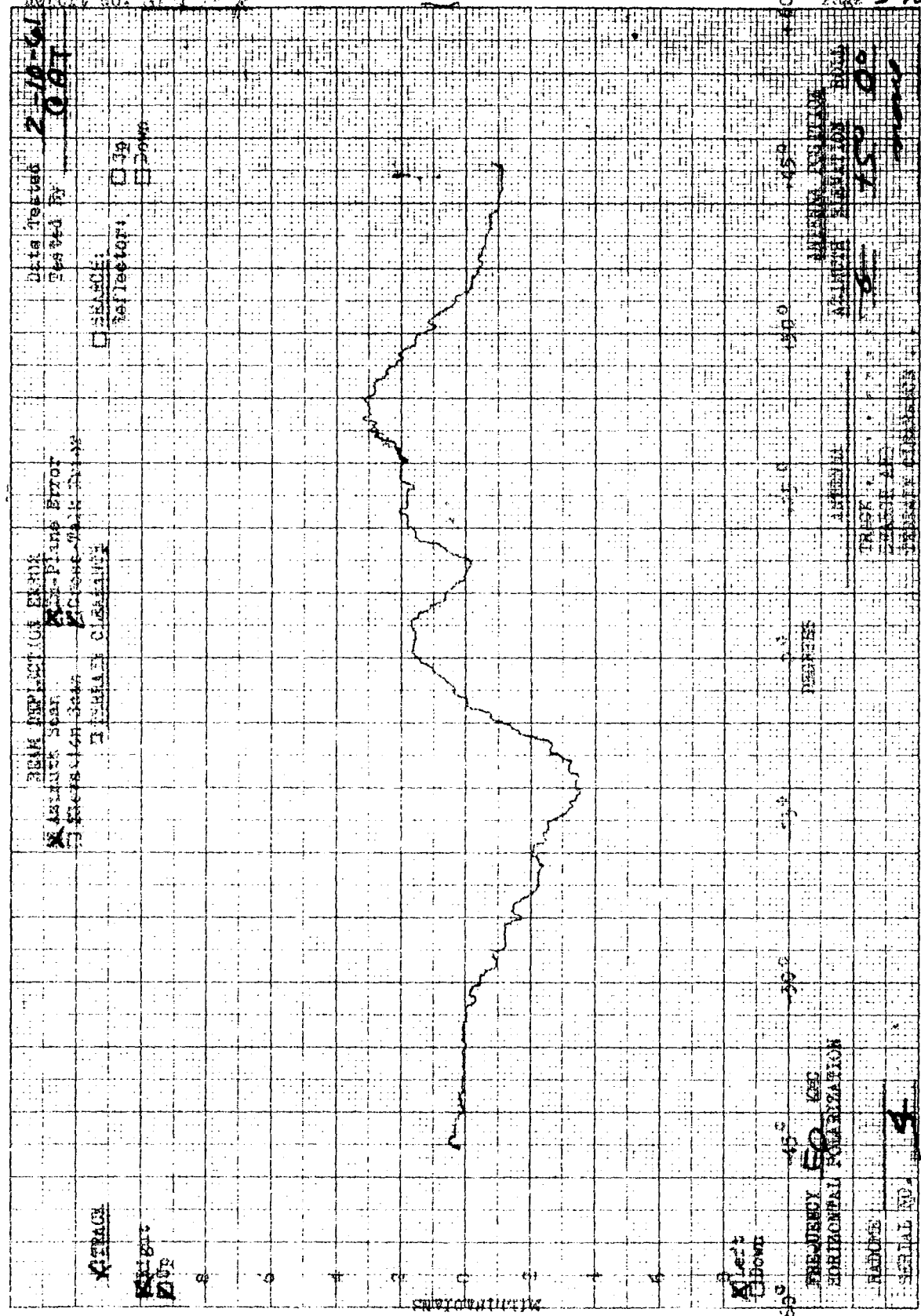
[illegible]

W
I
D

1. X-axis: 0 to 100 cm

Report No. 6412-1

Page 3-100



BEAM DEFLECTION OF BEAM
☒ X-axis Error
☒ Y-axis Error
☐ Z-axis Error
☐ X-axis Clearance
☐ Y-axis Clearance
☐ Z-axis Clearance

Date Tested: 2-10-61
 Tested By: 007

Reflector: ☐ 1a
☐ 2a

Alc's
 1 Down

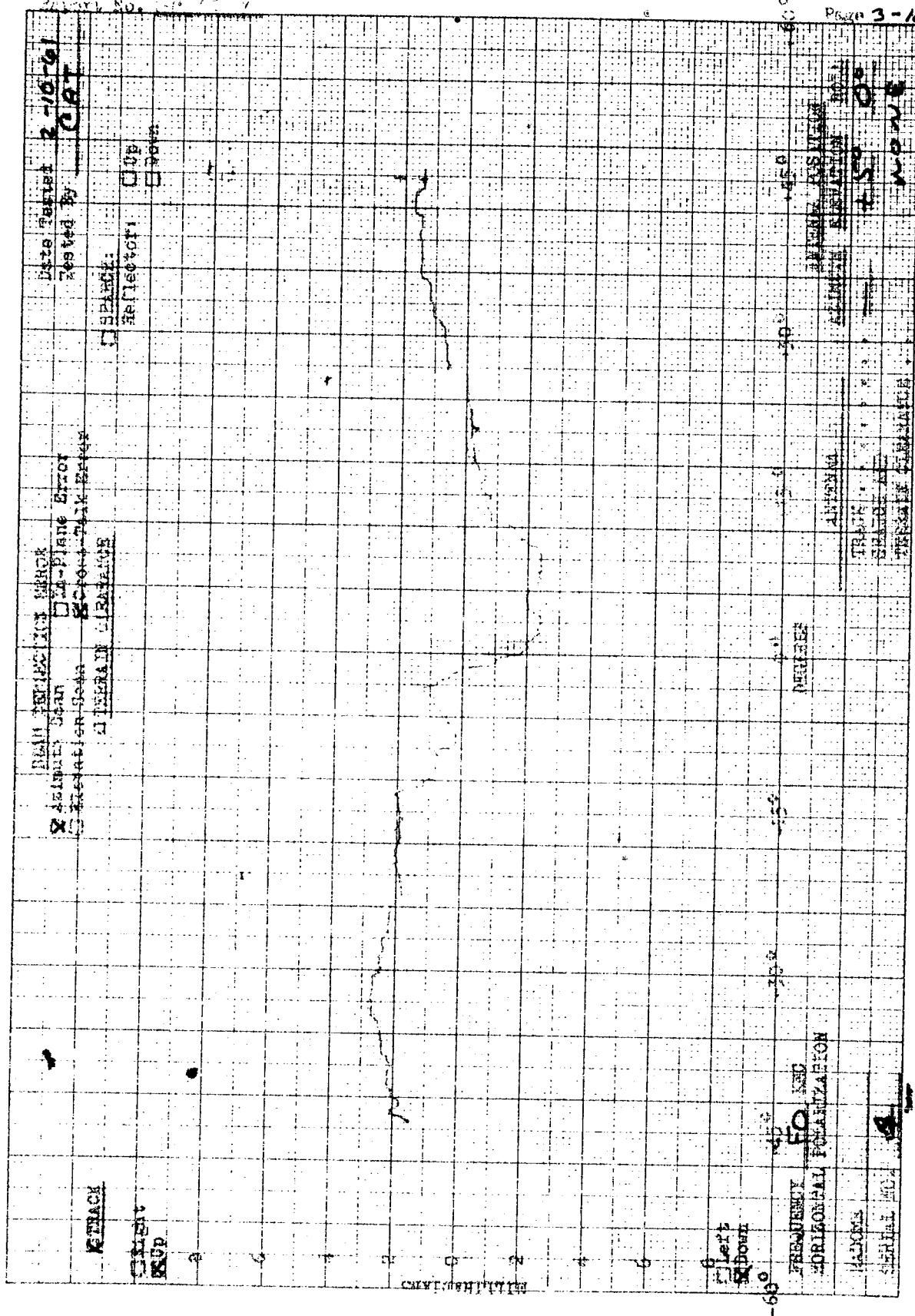
FREQUENCY 50 kHz
 HORIZONTAL ROTATION

ADJUST
 SERIAL NO. 4

INTERNAL
 TRIG.
 INTERNAL
 TRIG.
 INTERNAL
 TRIG.

INTERNAL
 TRIG.
 INTERNAL
 TRIG.
 INTERNAL
 TRIG.

P-E



Date Tested: 2-10-61
Tested by: COT

Beam Test: ☒ Beam Error
☒ Front-Back Error
☒ Beam in Line

SPARE: ☐ Reflector: ☐ Up ☐ Down

FREQUENCY 50 MHz
HORIZONTAL POLARIZATION

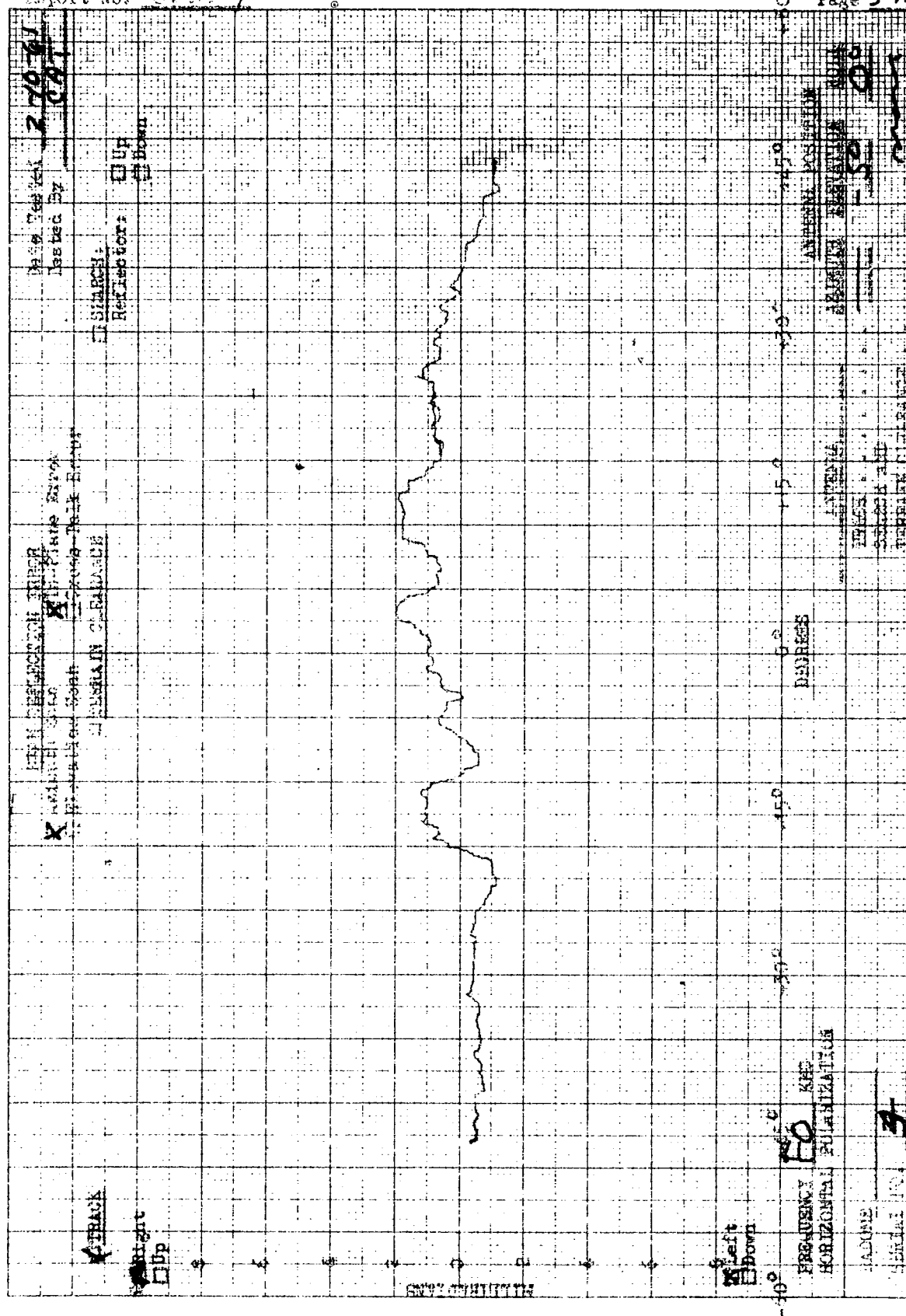
AXES
SERIAL NO. 1

ANTENNA
TRAJECTORY
ELEVATION
AZIMUTH
DISTANCE
TIME
T-50 00
none

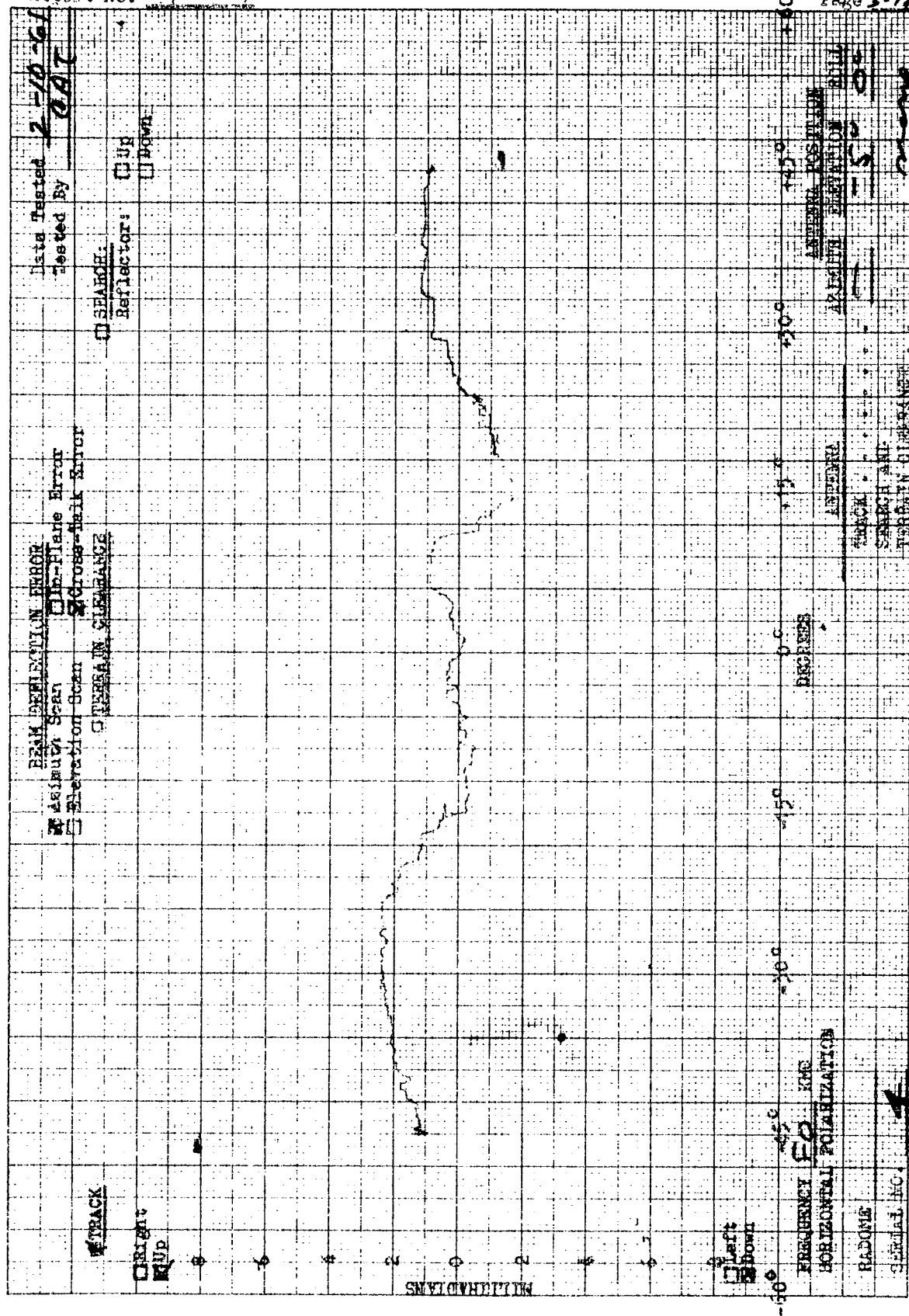
P-E

41A

41A



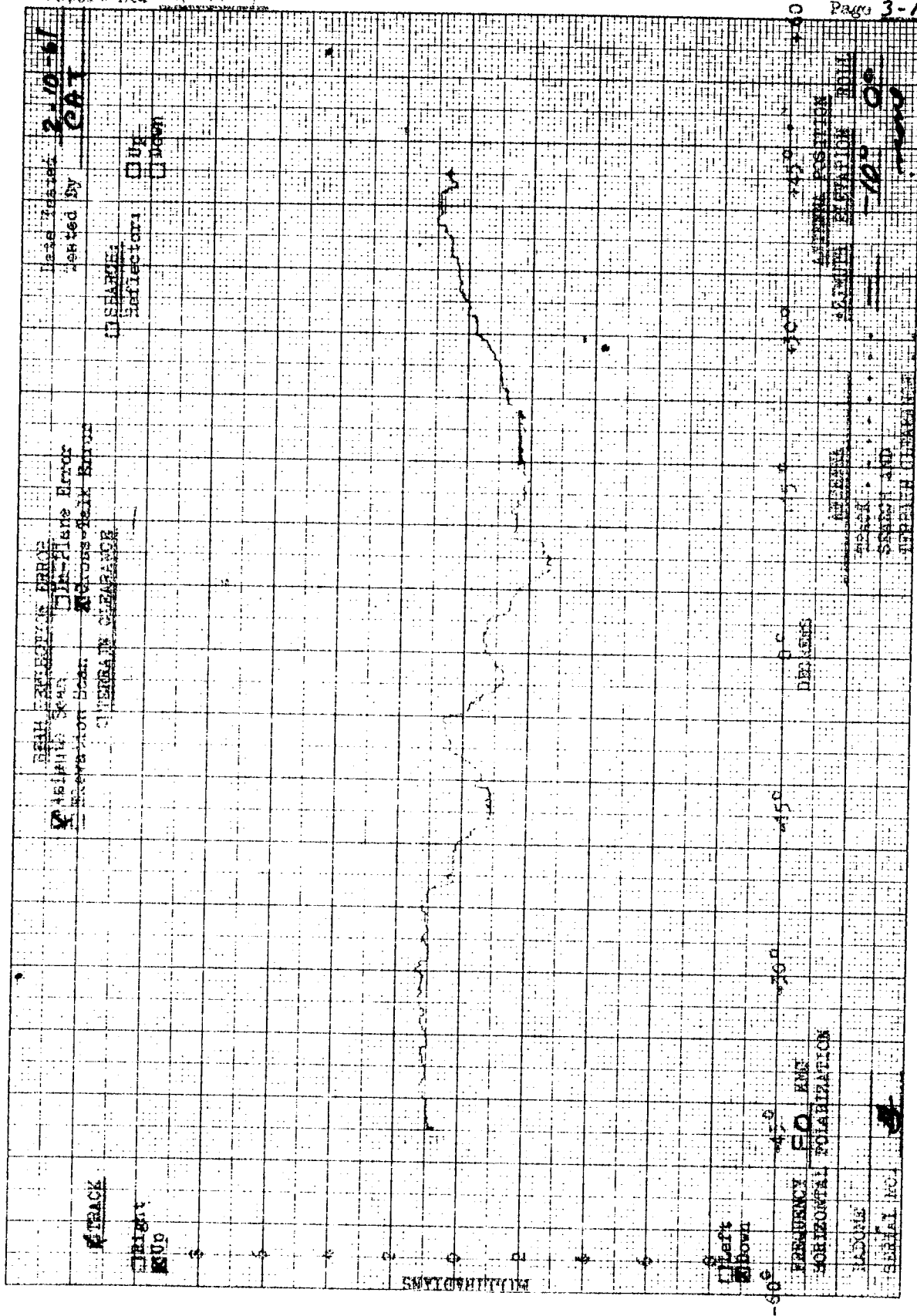
W
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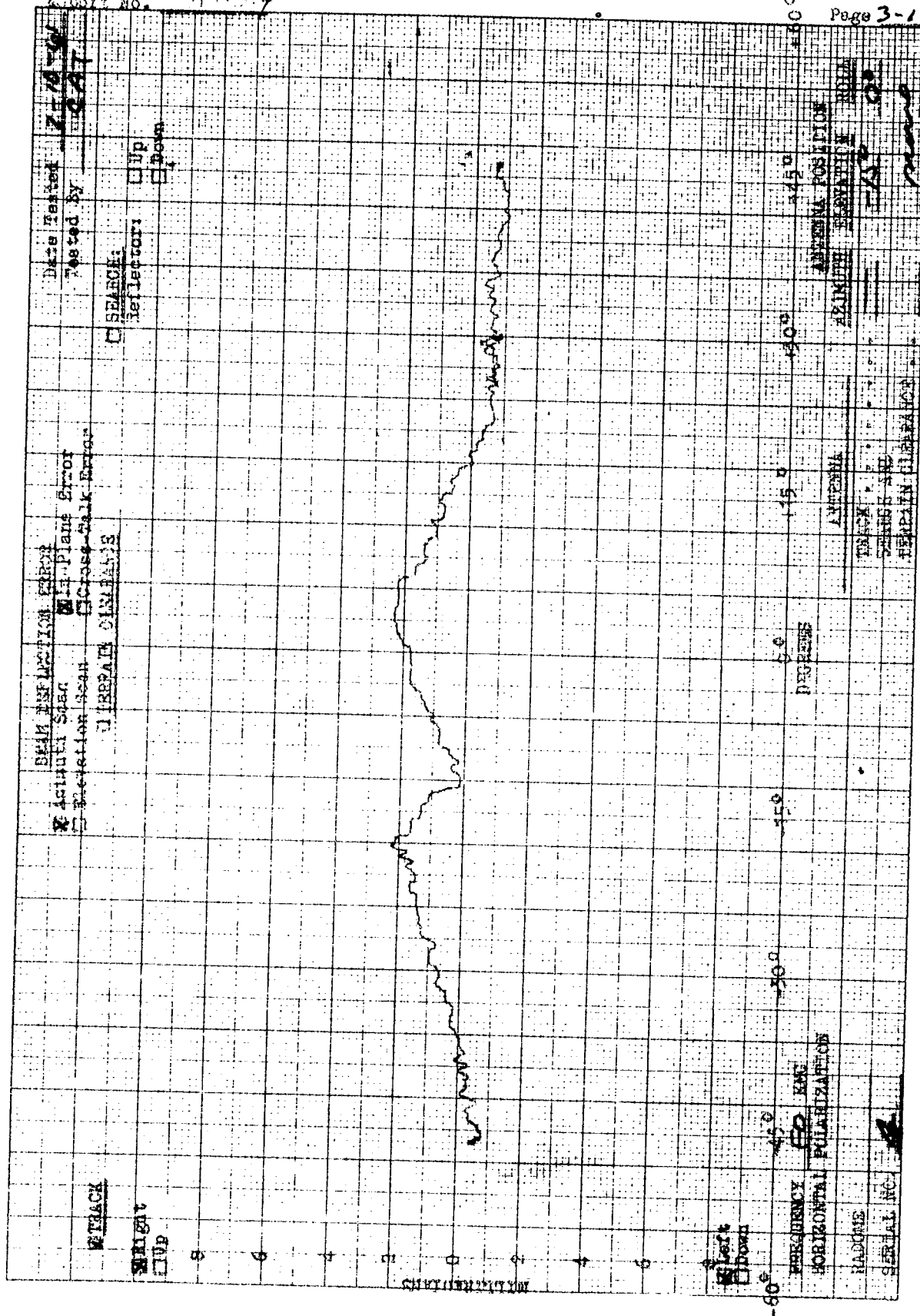
7-8

14.

Page 3-107

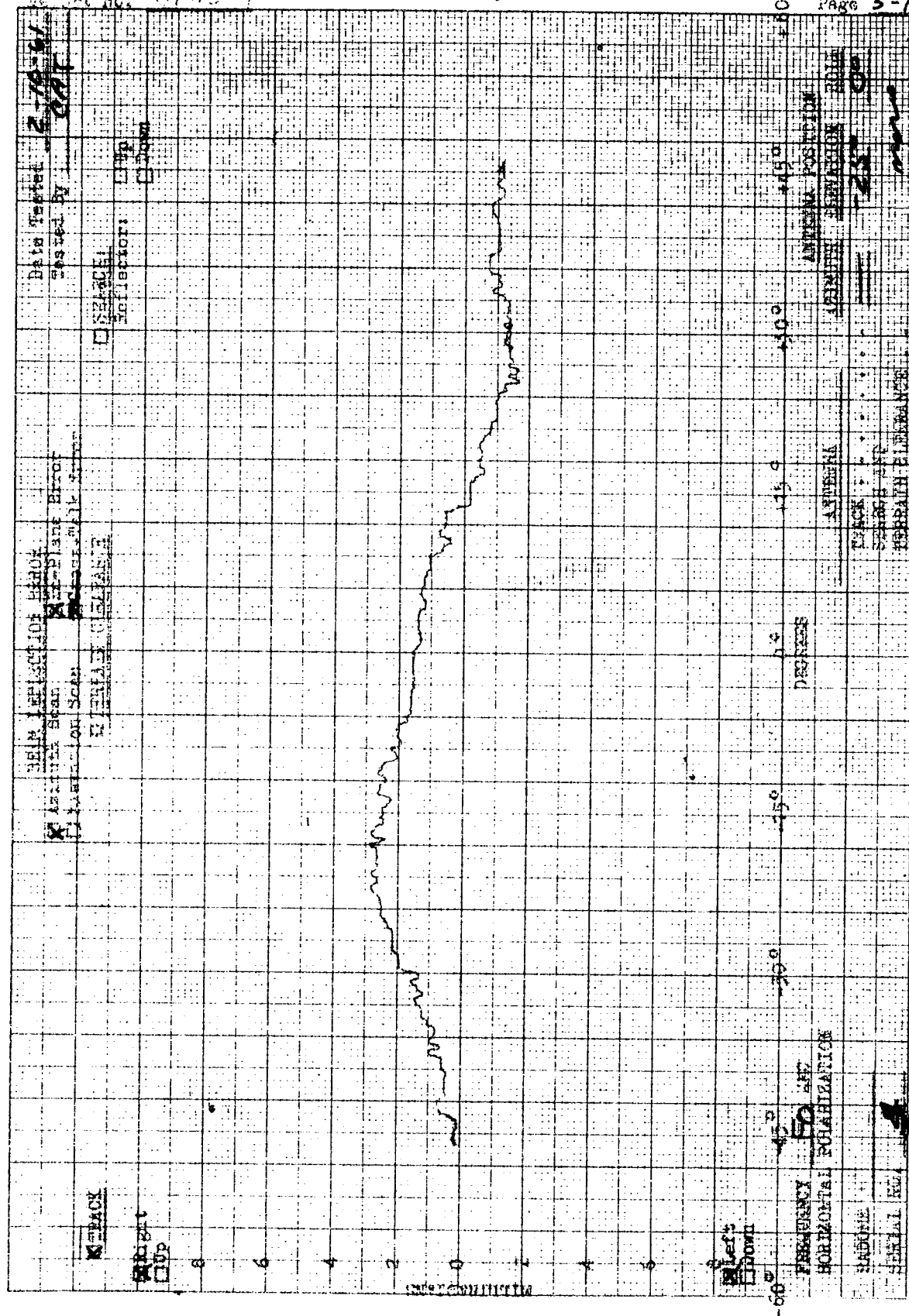


W
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Q



10

W
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A



4-2

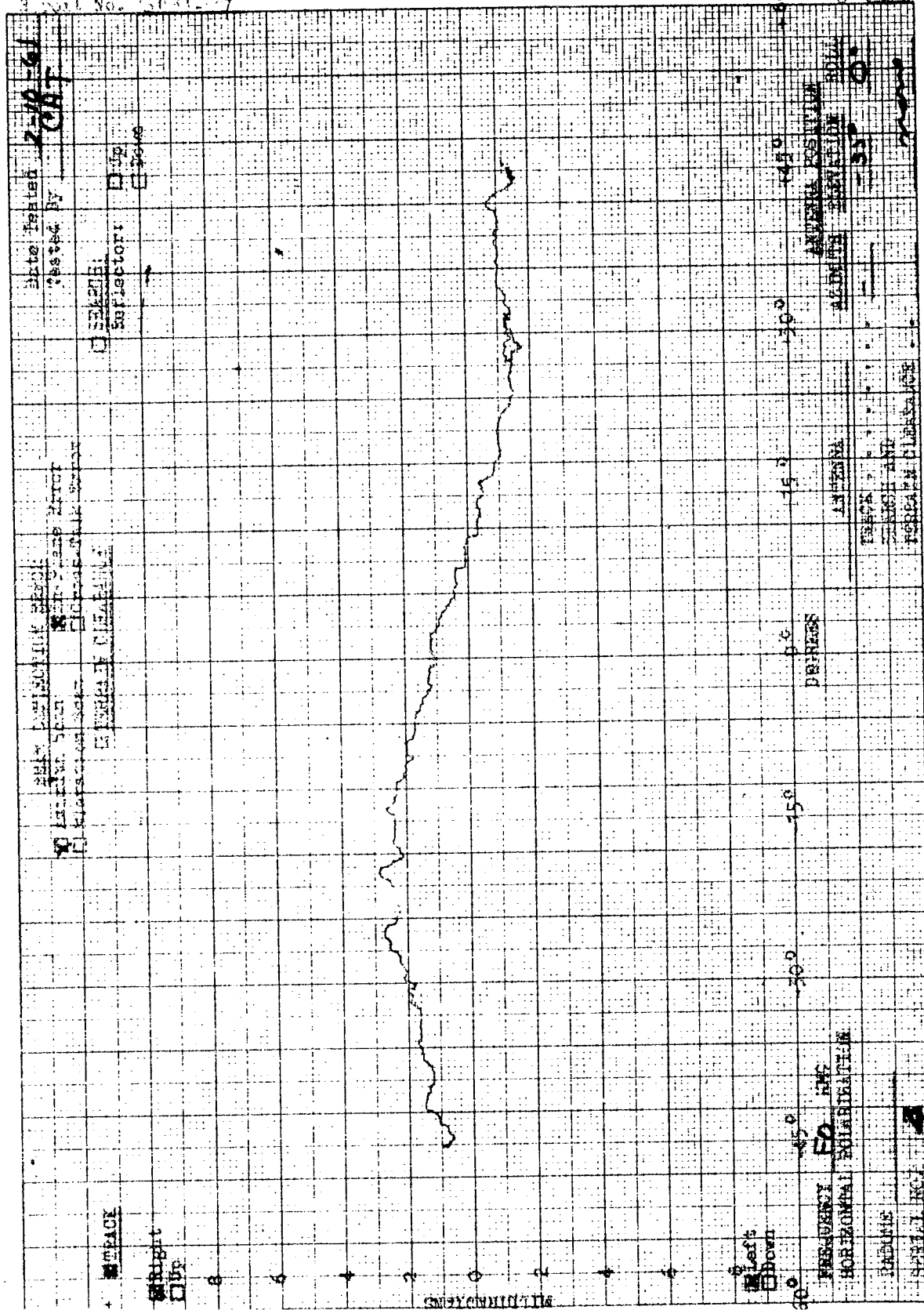
Graph showing the relationship between Frequency (FO) and Horizontal Resolution. The vertical axis is labeled "FREQUENCY FO MHz" and ranges from 0 to 100. The horizontal axis is labeled "HORIZONTAL RESOLUTION" and ranges from 0 to 100. A curve is plotted, showing that as frequency increases, horizontal resolution also increases. The curve starts at approximately (10, 10) and rises to approximately (100, 100).

W
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10X10 TO THE 1/2 INCH
NEW FILM ESSENCE
359-110

Serial No. 68424

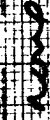
Page 3-112



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Exhibit No. 6113-4

1.



W
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10 X 10 TO THE FINCH 359-110
NORTH AUSTIN, TEXAS

WIPACK

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THE
HOT
SPOT

FREQUENCY
HORIZONTAL
POLARIZATION

22

張五郎

SELF DEFENSATION GROUP
NO ARREST FOR
UNLAWFUL POSSESSION
OF WEAPON IN CIRCUMSTANCES
WHICH WOULD BE
A REASONABLE ERROR

19-07-2
19-07-2

AD PASSED BY
DEBBIE STARR

有欲觀者

Robertson

[illegible]

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TABLE

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THE NEW YORK PUBLIC LIBRARY
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455 FIFTH AVENUE NEW YORK 17, N. Y.

THE

Table 1

2

Page 3-115

W
I
A

SECTION 34

TRACK BORESIGHT ERROR

$F_0 @ -45^\circ$ ROLL

THE BRUNSWICK-BALKE-COLLENDER COMPANY



Exhibit No. 641-4

Ad received
11-01-2
Tutut at 11-01-2

30575

Reflector: ☐ Up ☐ Down

[illegible]

TRACK

THE UNIVERSITY OF CHICAGO

24

12-10-1944

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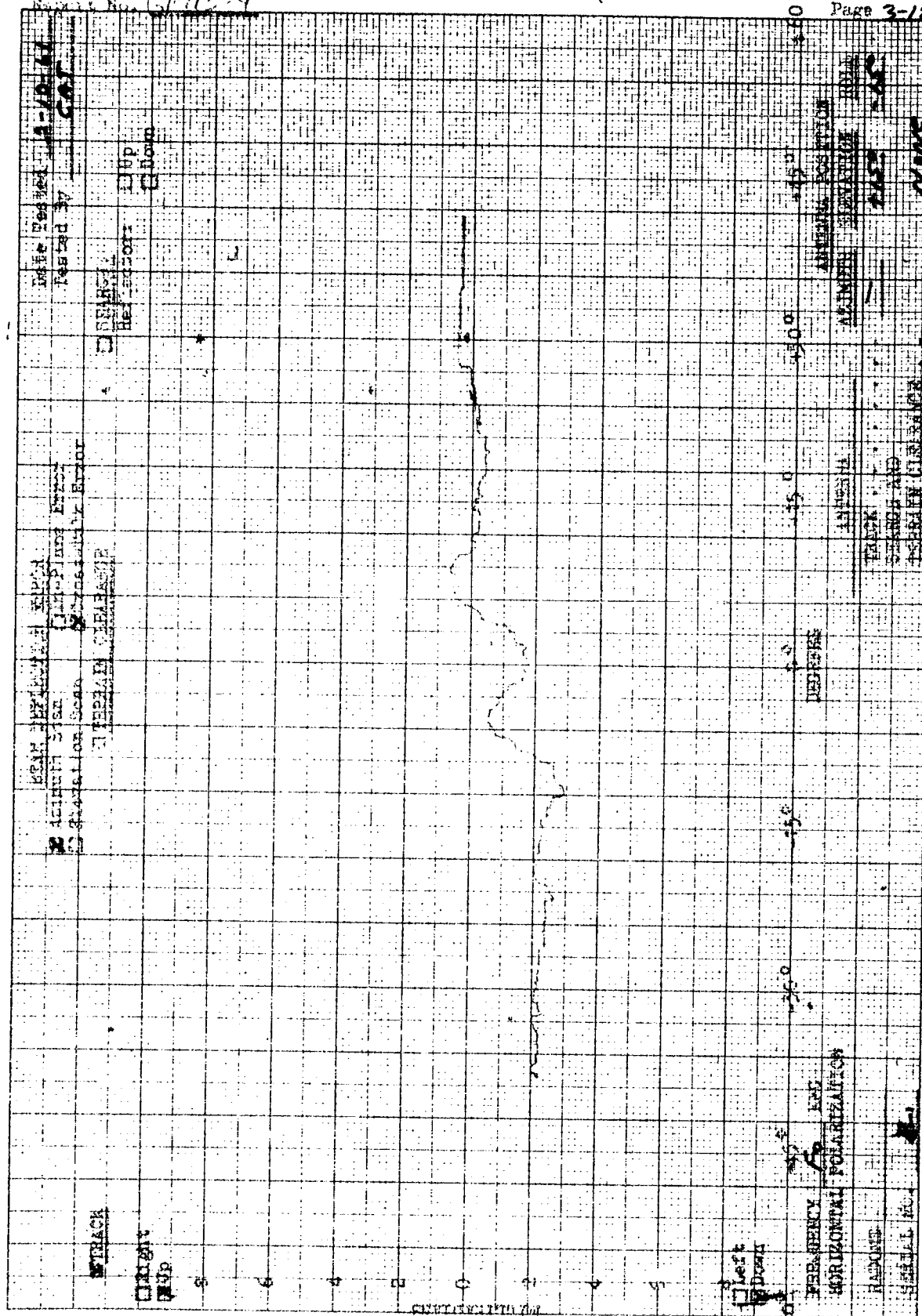
SECRET

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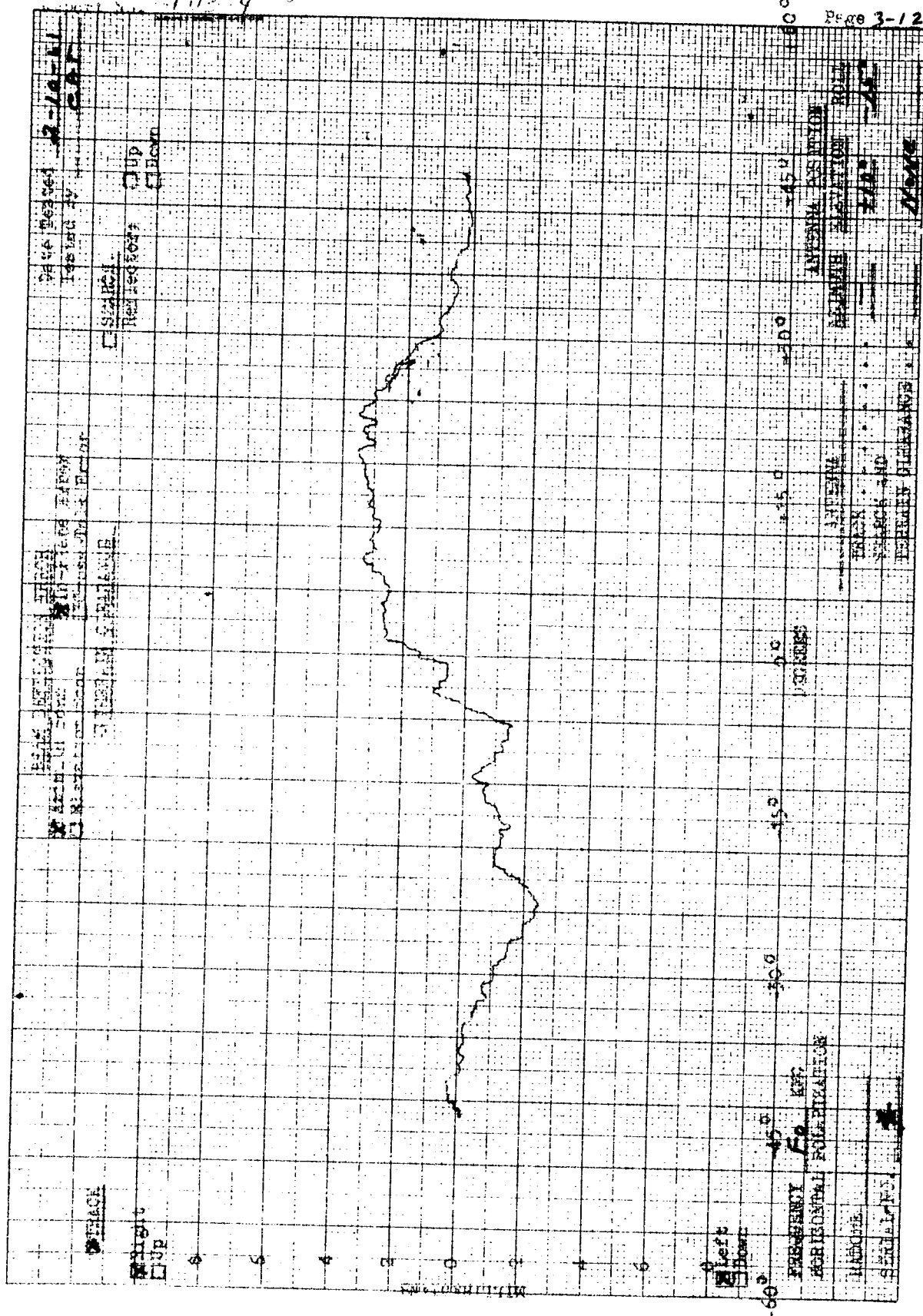
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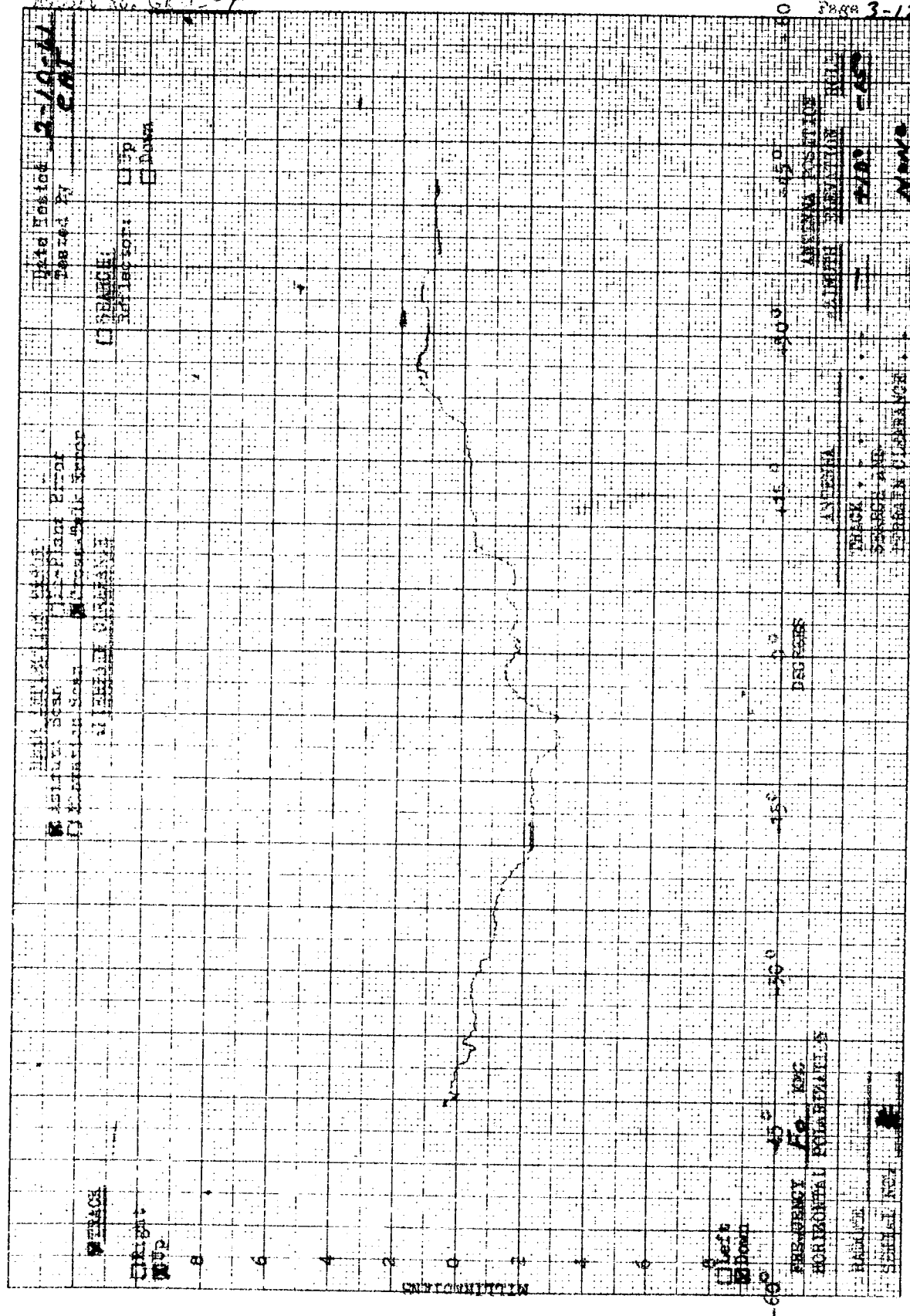
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24



P-E



23

[illegible][illegible]

3-10-61	3-10-61
Delta Tested	Tested By

REFLECTOR:	REFLECTOR:	REFLECTOR:
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406 1000

PREPARED BY: DATE:
HORIZONTAL POLARIZATION

FILE

五

五十二

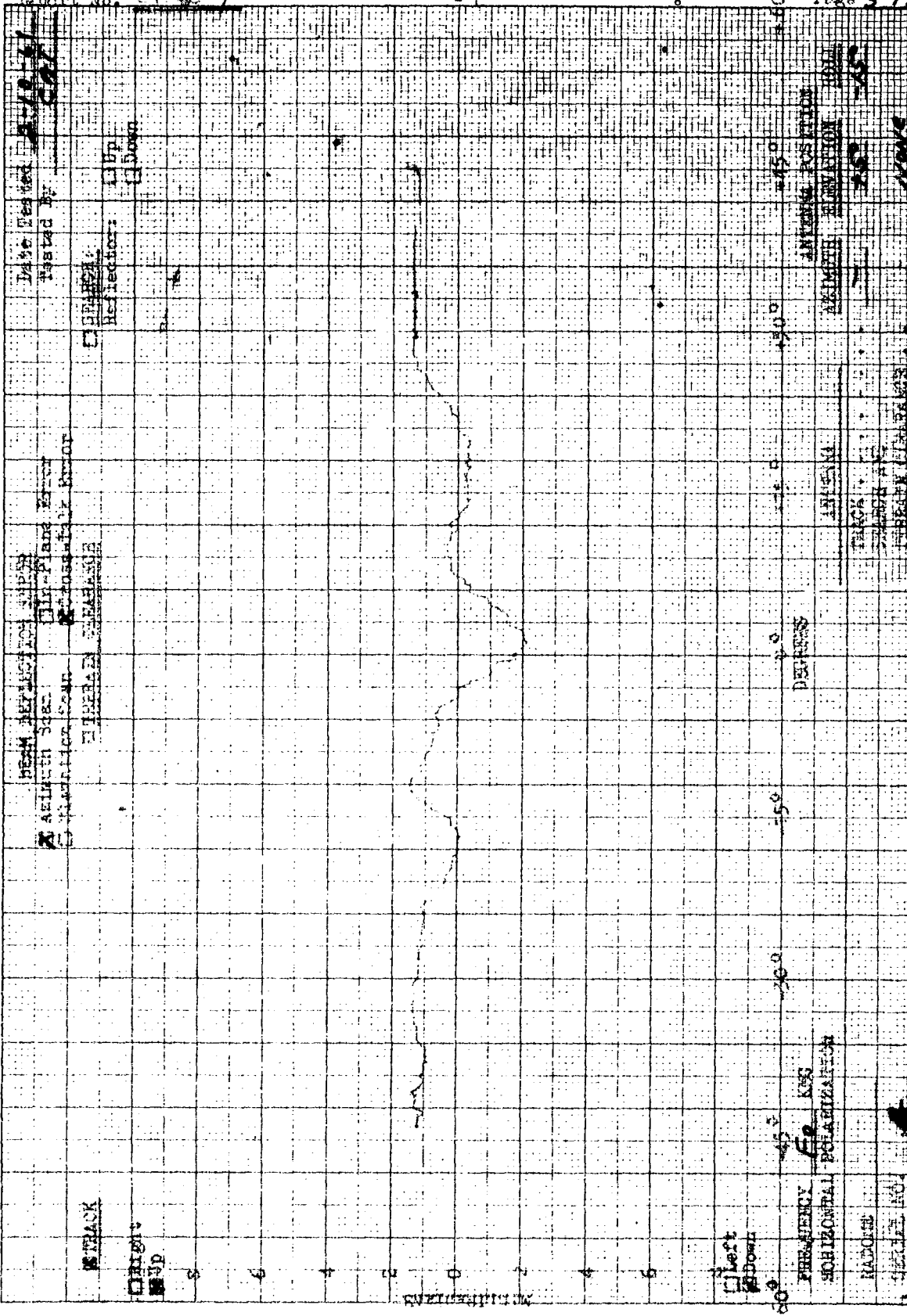
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Q-14

Page 3-123



W
2

Left
Down

FREQUENCY MHz

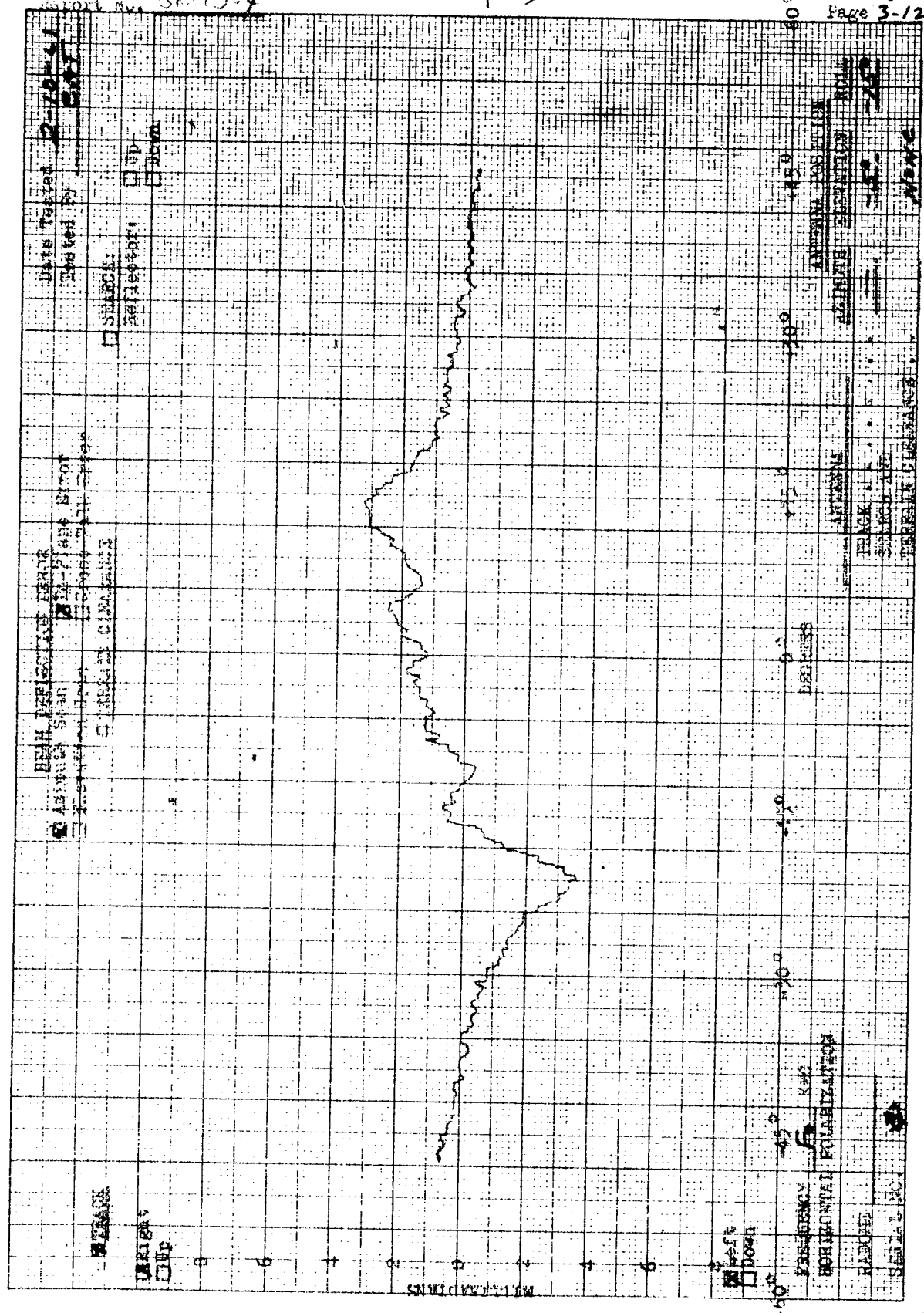
HORIZONTAL POLARIZATION

450 500 550

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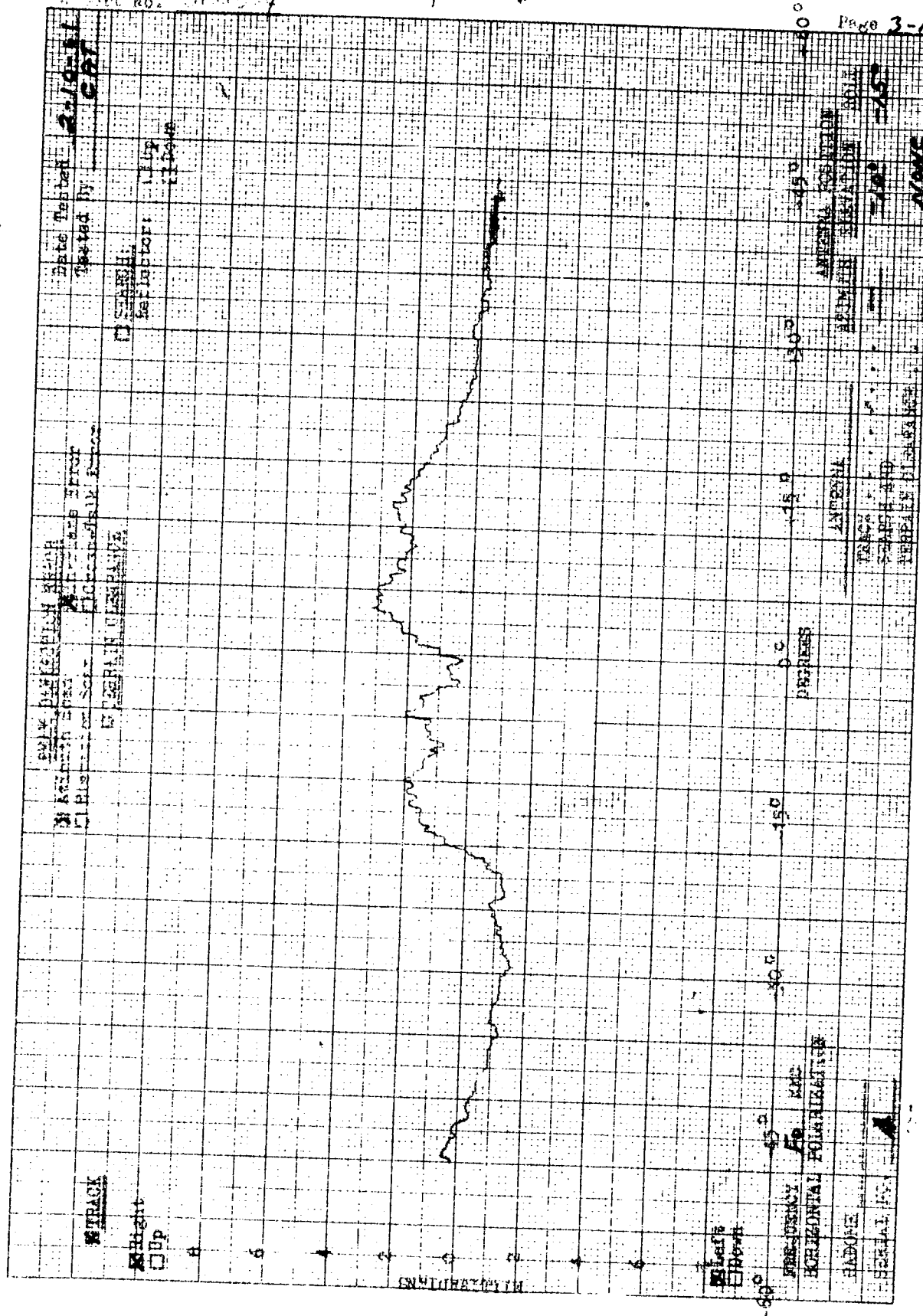
2

10 X 10 TO THE MIN. M 300-115
 10000 (FEET) (N. 10000)



P-E

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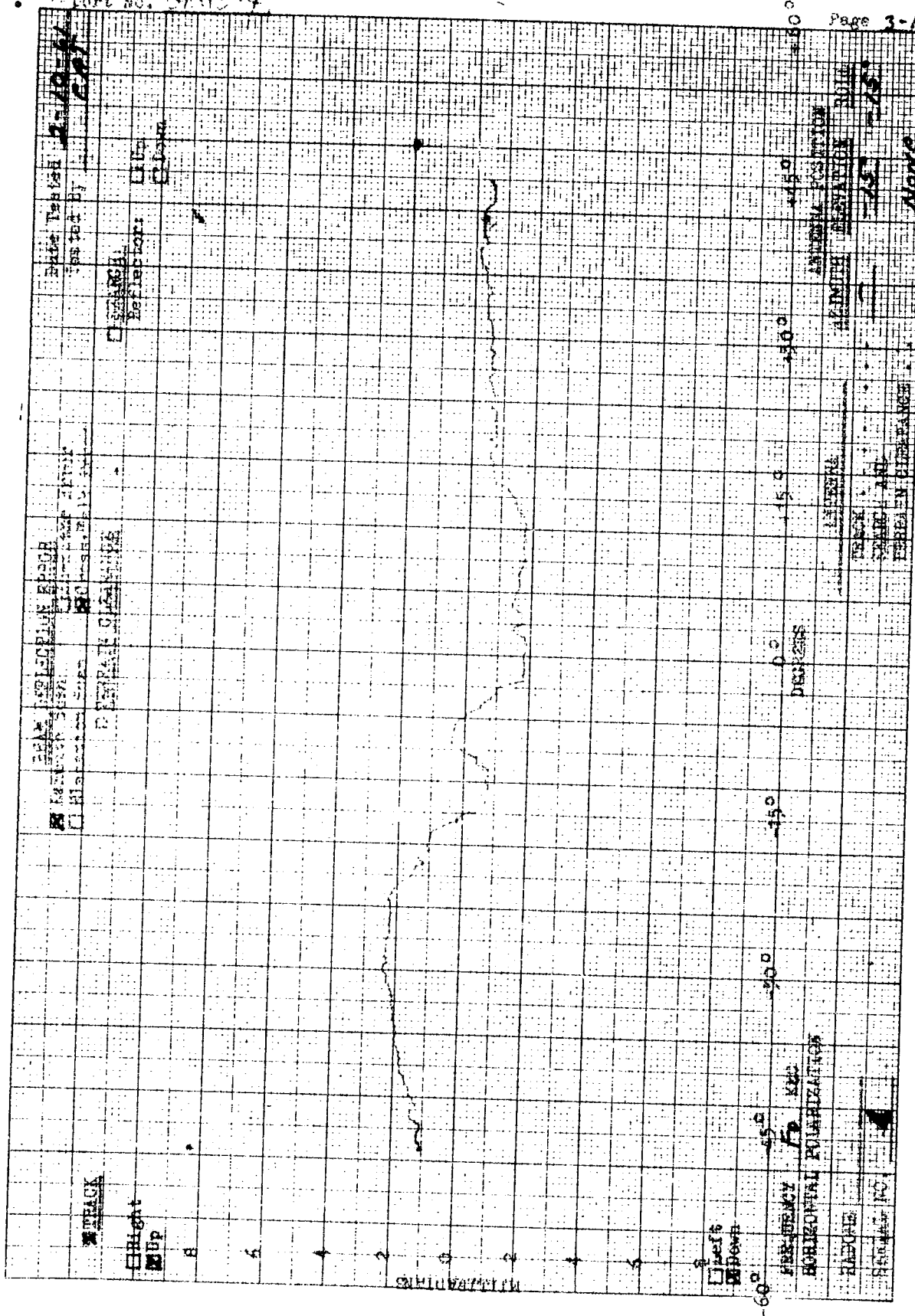


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NAME: [illegible] THE: [illegible] 350-110

Report No. 14115-4

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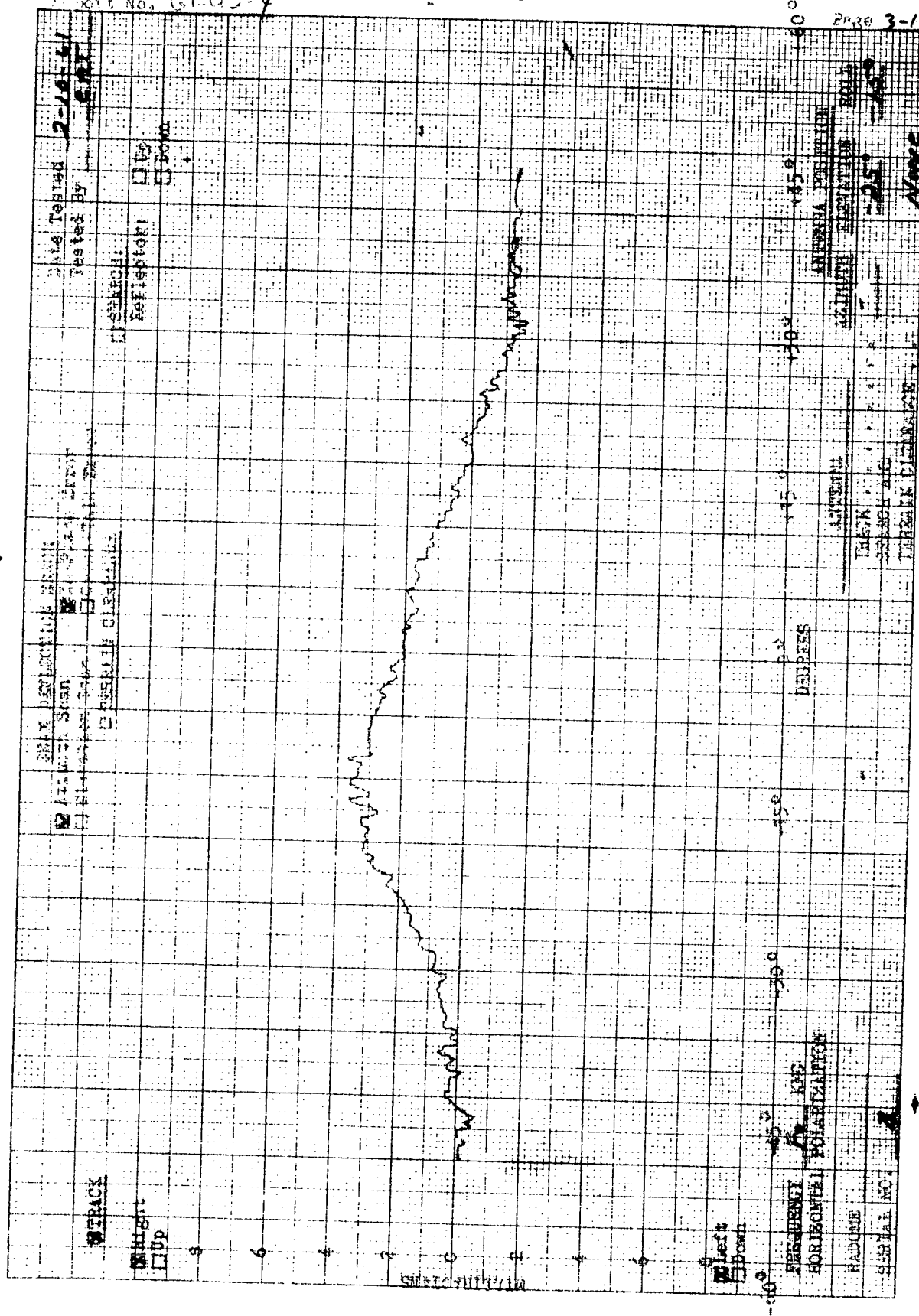


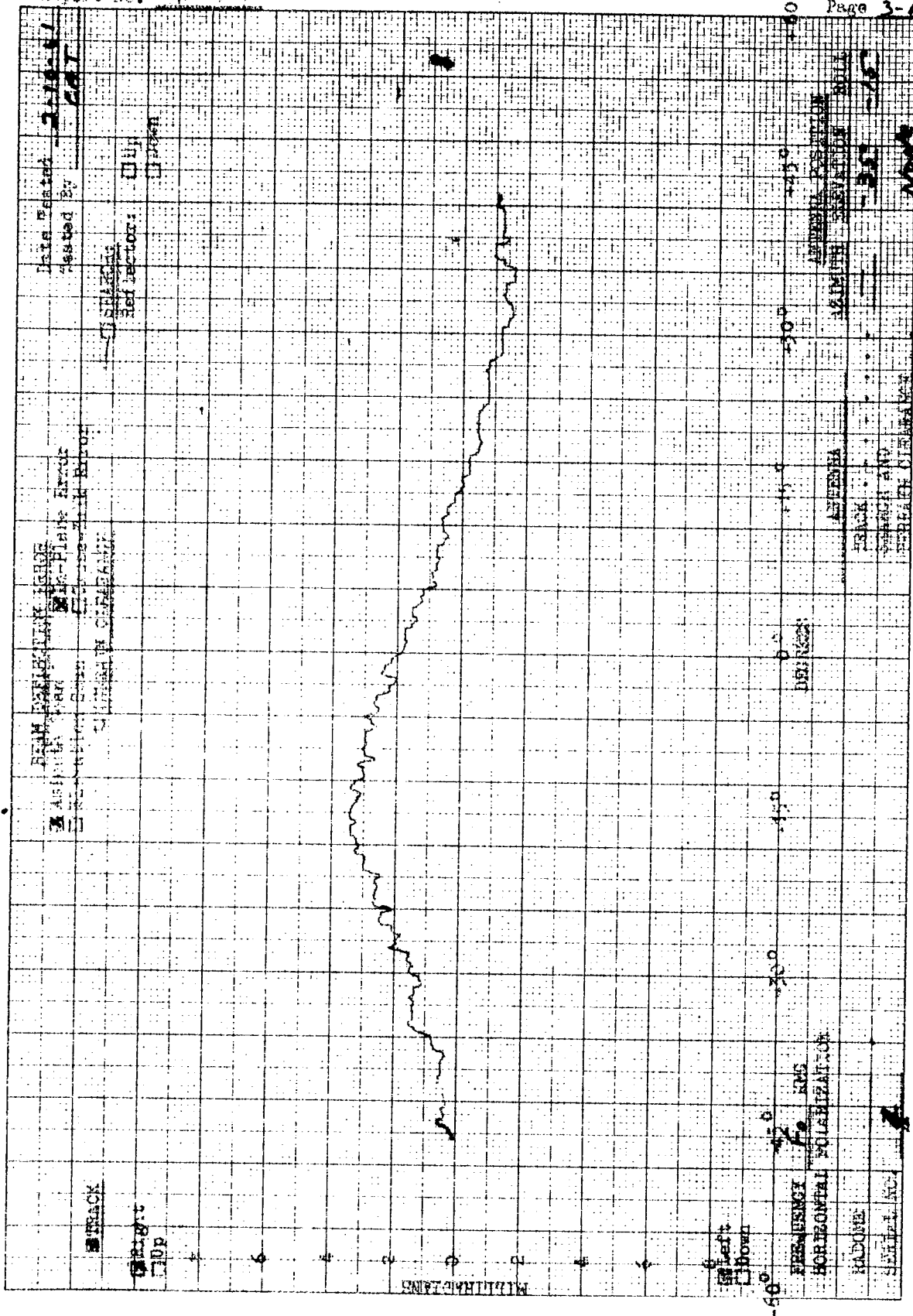
P-E

Box No. 6142-4

Page 3-133

25





TRACK

RIGHT

TOP

Left

Down

FREQUENCY

HORIZONTAL POLARIZATION

WAVE

UNIT NO.

BEAM POSITIONING ERROR
☒ ASHLEY Error
☐ Rotation Error
☐ Mic-Plane Error
☐ Cross-section Error
☐ CLIMB IN OR PLANE

Date tested: 2-10-81
 Tested by: CBT
 Reflector: ☐ Green
☐ Green

DEVICES

ALTIMETER

TRACK

SEARCH AND

RESEARCH

RESEARCH

ALTIMETER POSITION

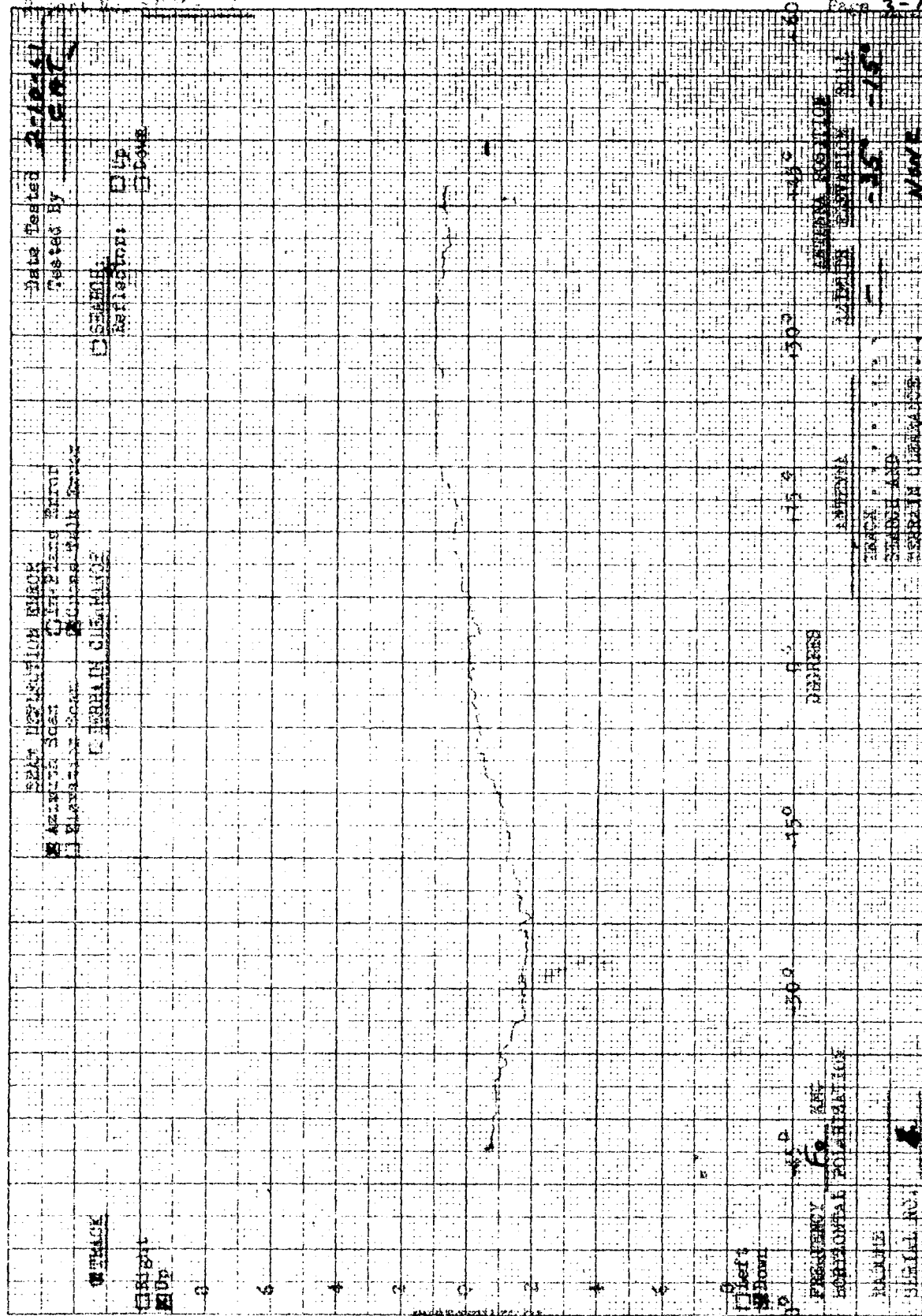
ALTIMETER POSITION

ALTIMETER POSITION

ALTIMETER POSITION

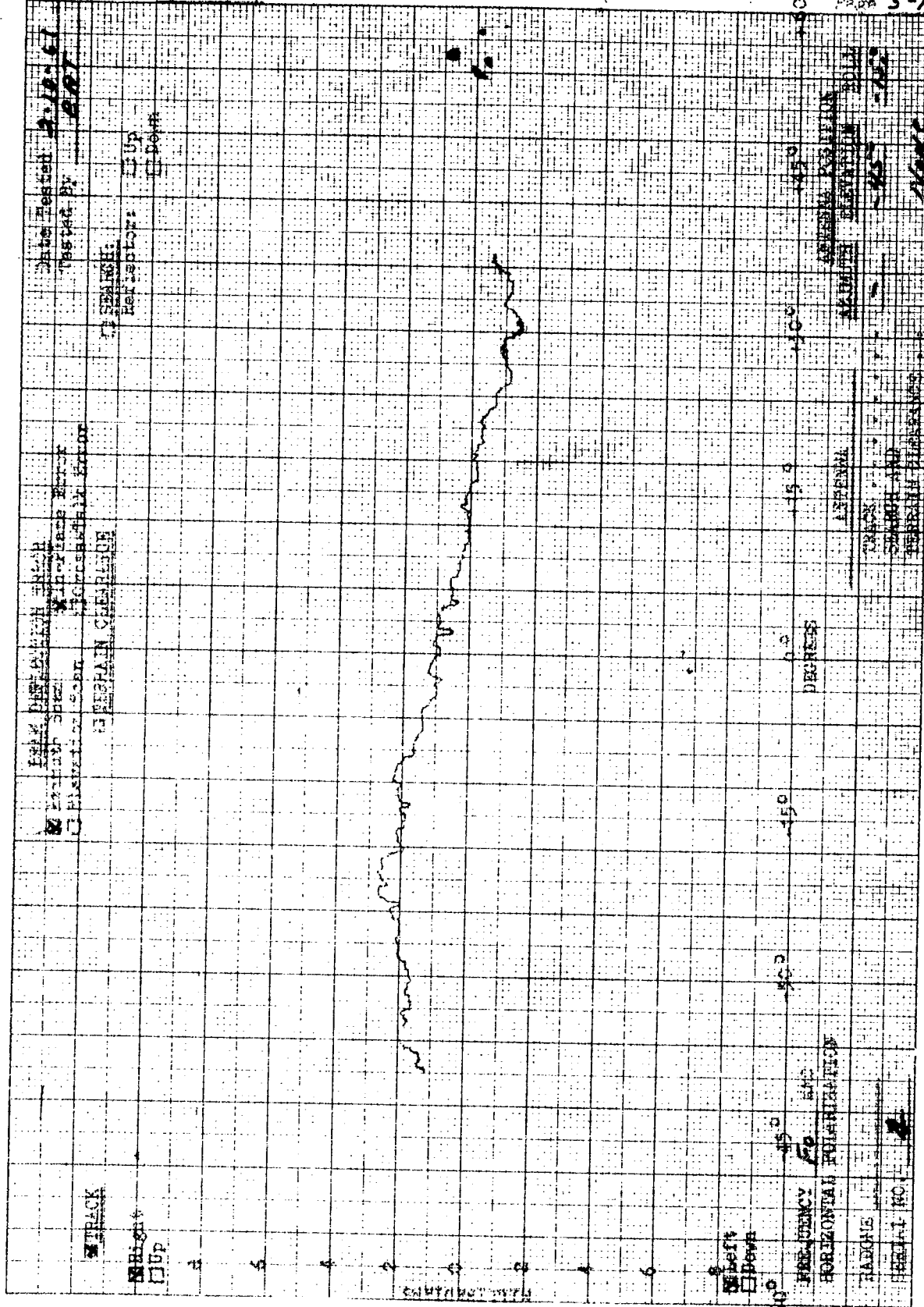
ALTIMETER POSITION

8000' 10 X 10 TO THE 1/2 INCH 359-116

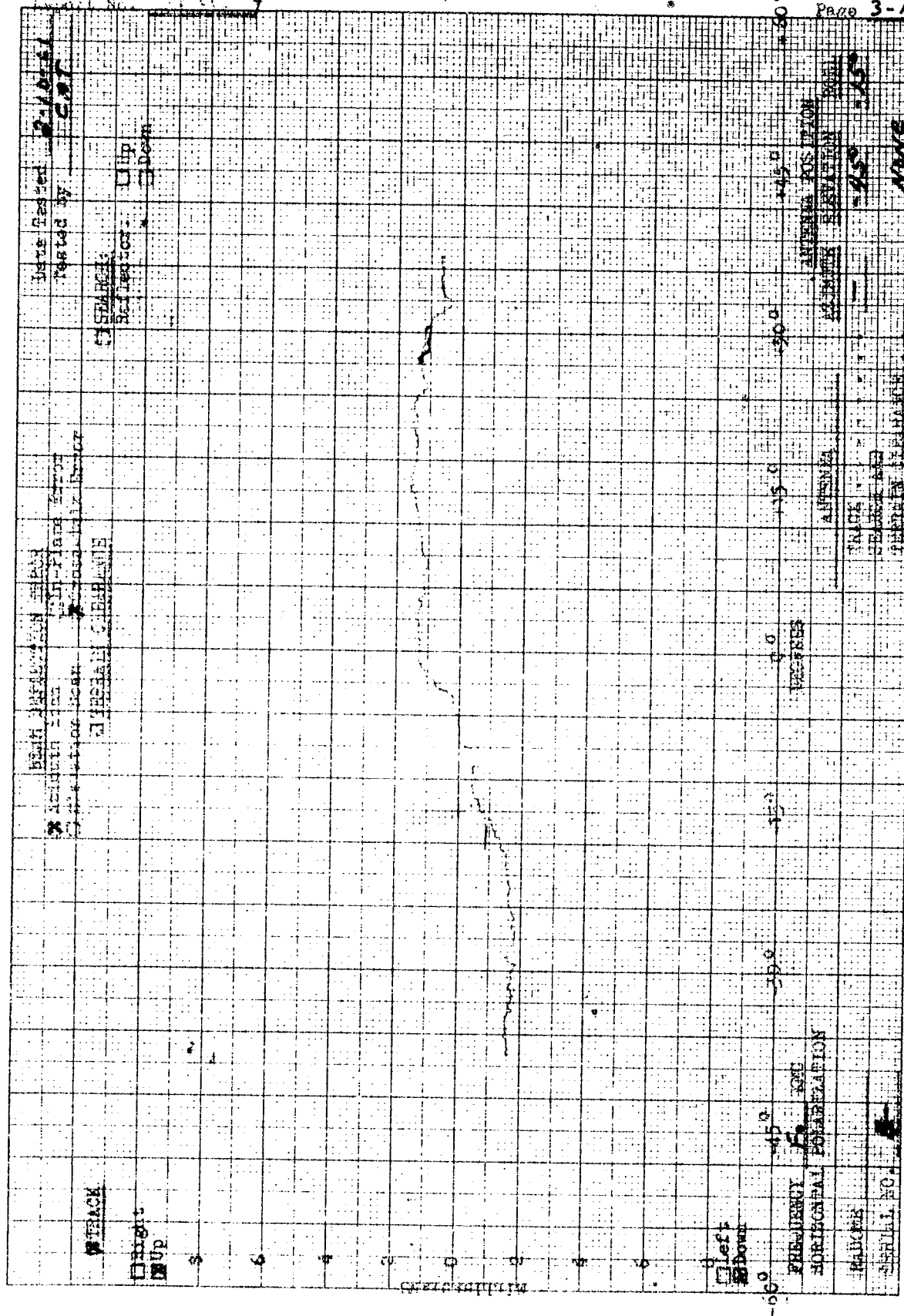


Report No. 3PL15-4

Page 3 - 132



10X10T0THI 350-11G
RECEIVED 2/10/61



-P-E

SECTION 55

TRUCK BOUNDSHIFT ERROR

F₀ @ -50° RLL

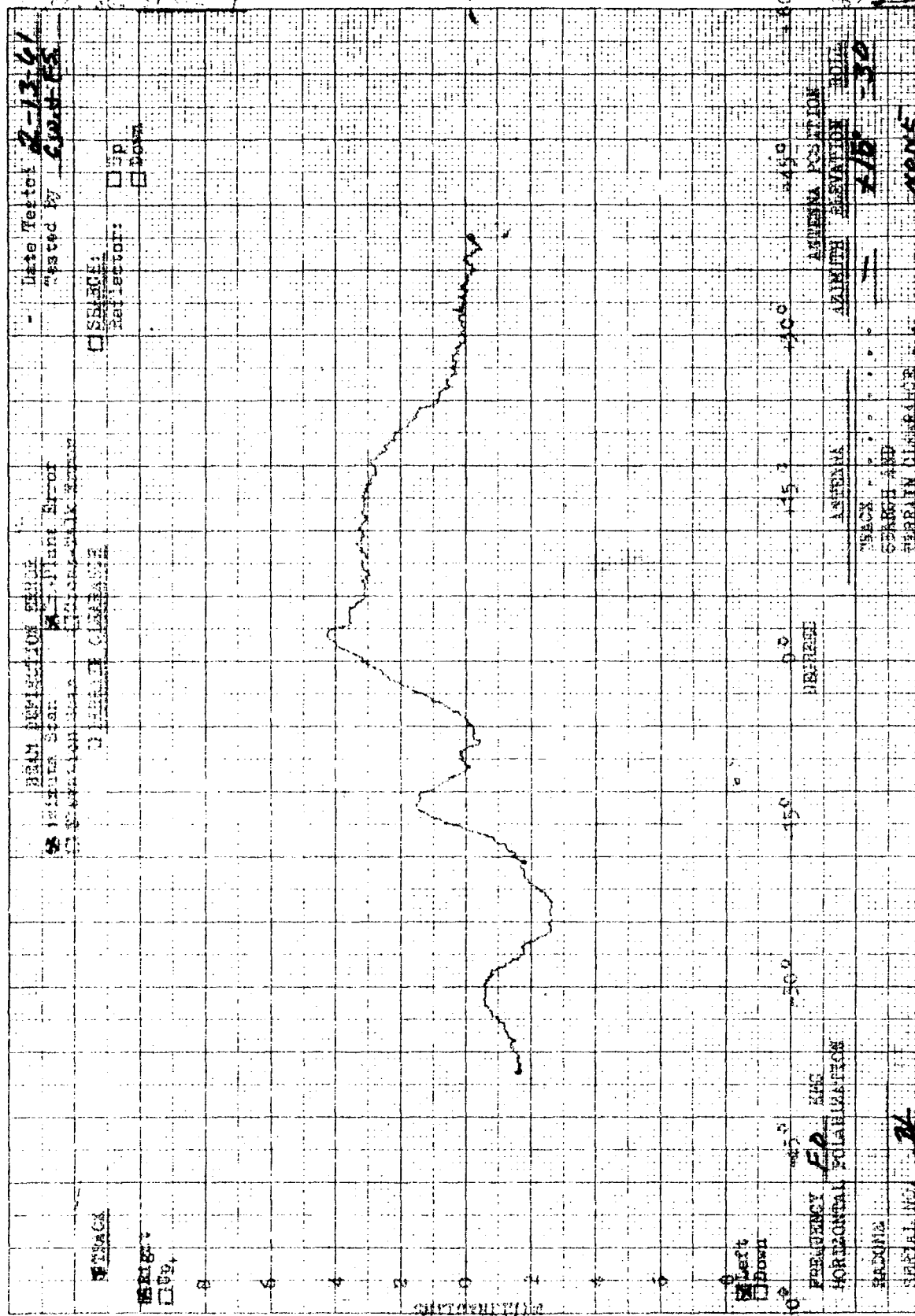
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GRV3-4

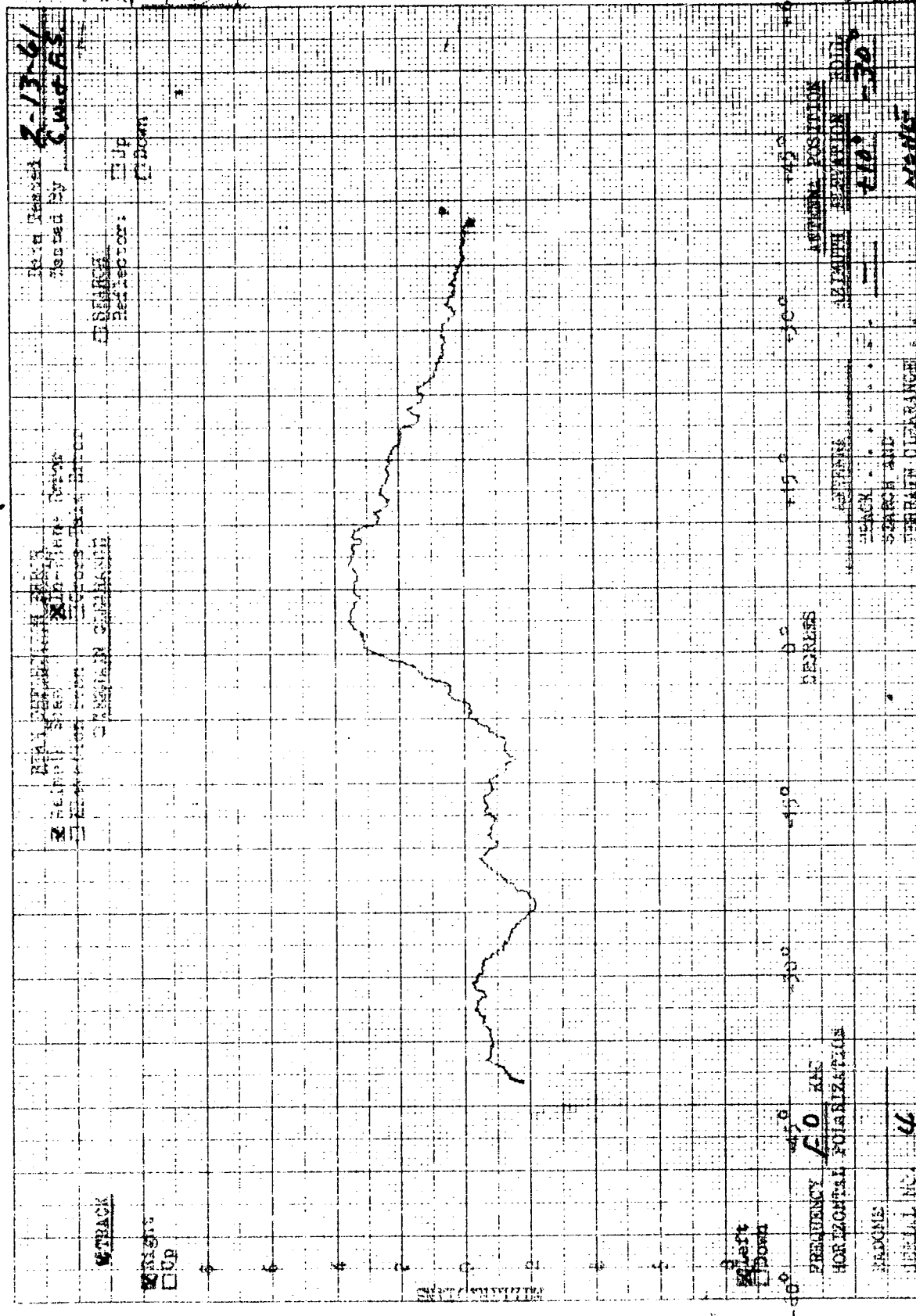
Page 3-141

[illegible]

No Endorse



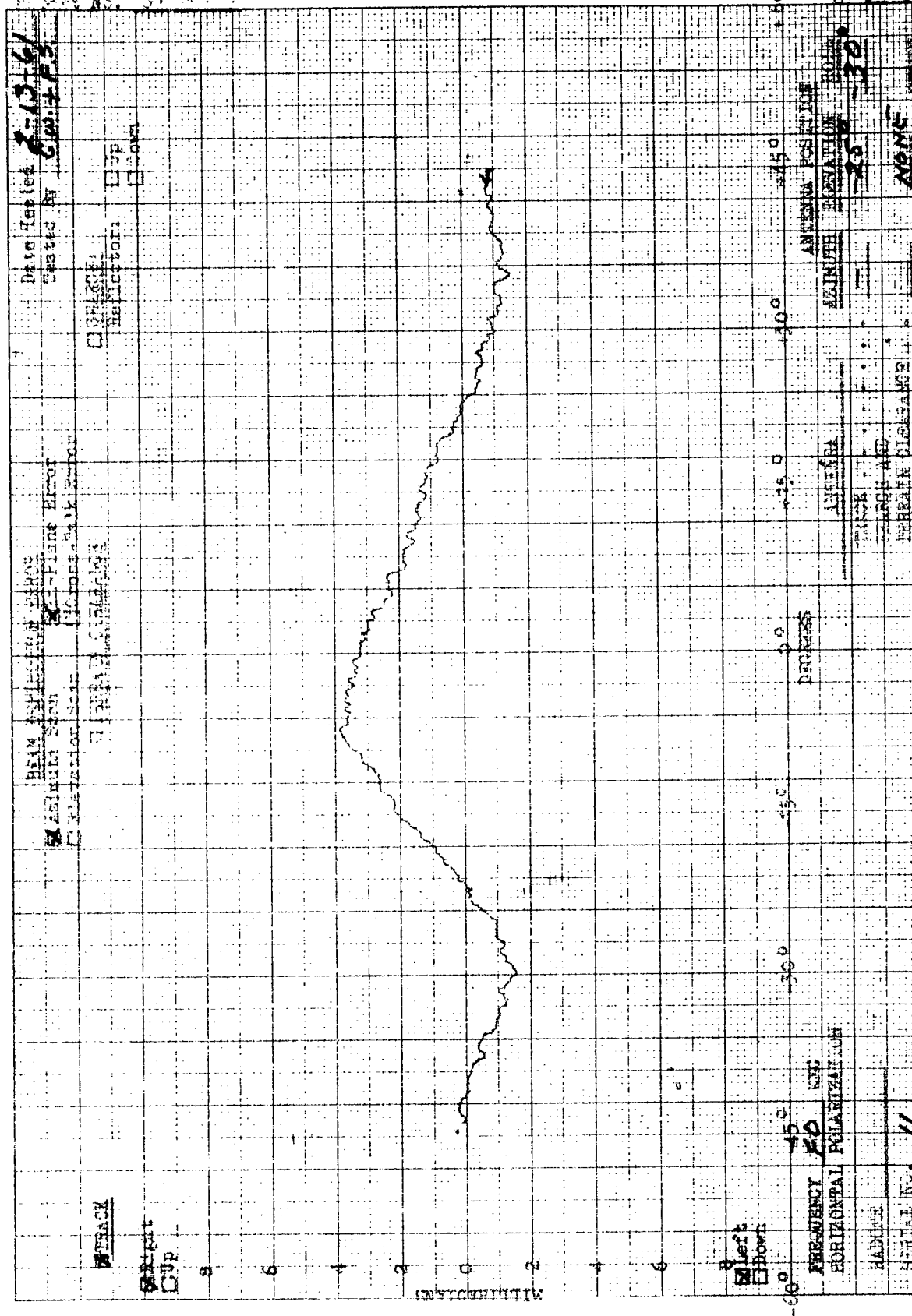
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[illegible]

[illegible]

[illegible]



SECRET

[illegible]

SECTION 36

TRACK BORESIGHT ERROR

F_0 @ -60° ROLL

3-13-61
Tested By
624ES

Electro-
Chemical

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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10/15/54

250

附錄

PRECEDENCE **FO** AND
HORIZONTAL POSITION

1000

12

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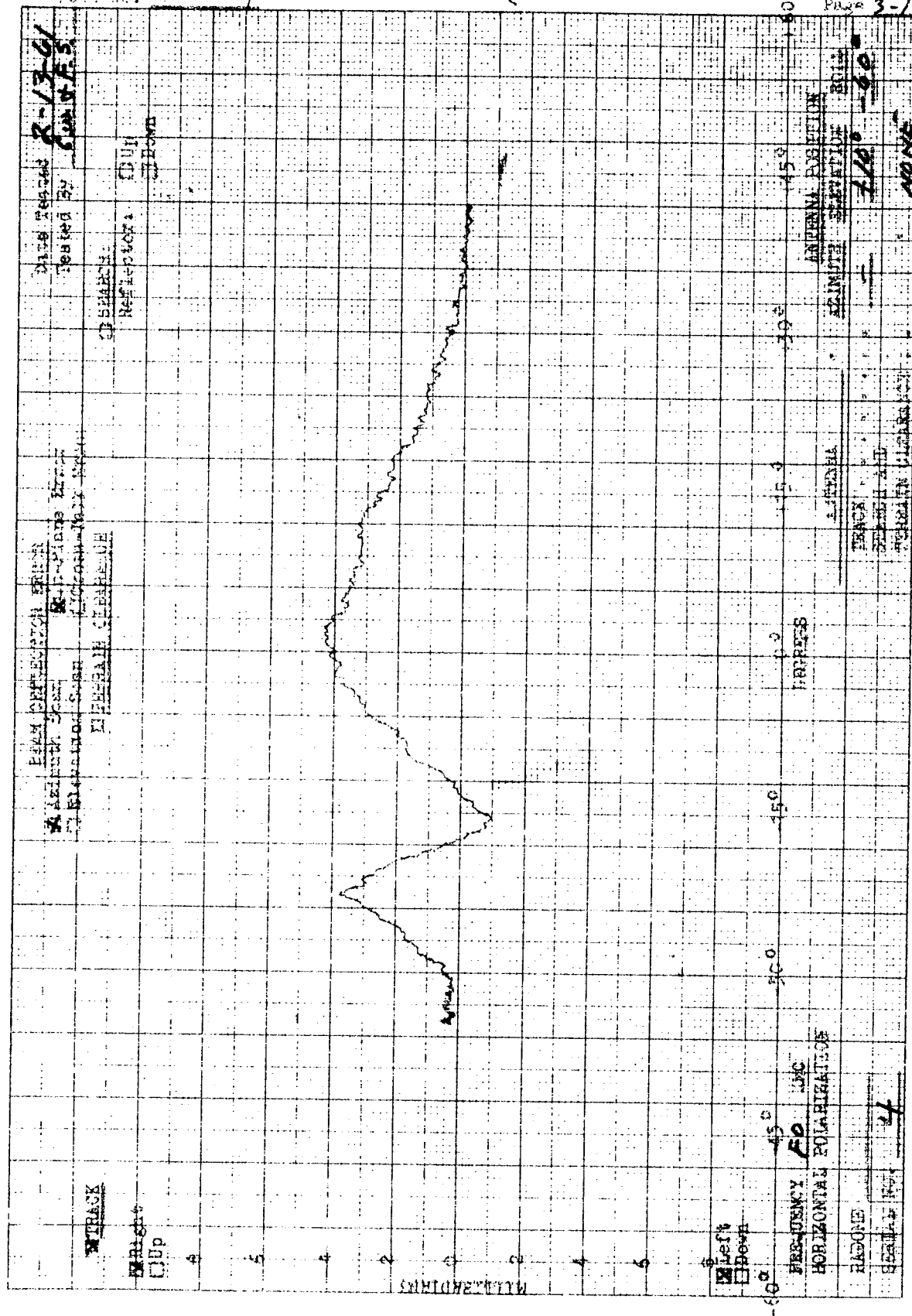
THE UNIVERSITY OF CHICAGO

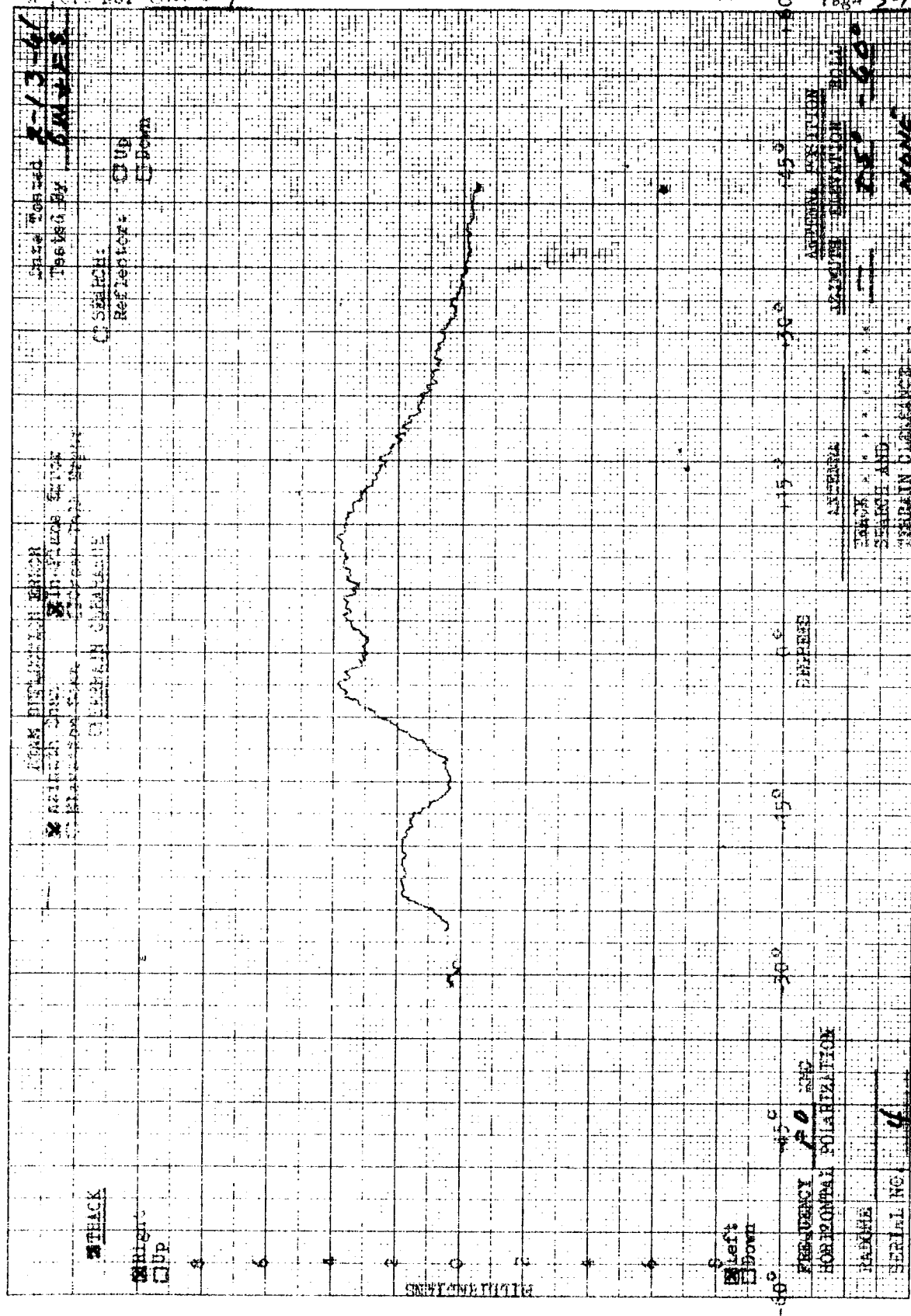
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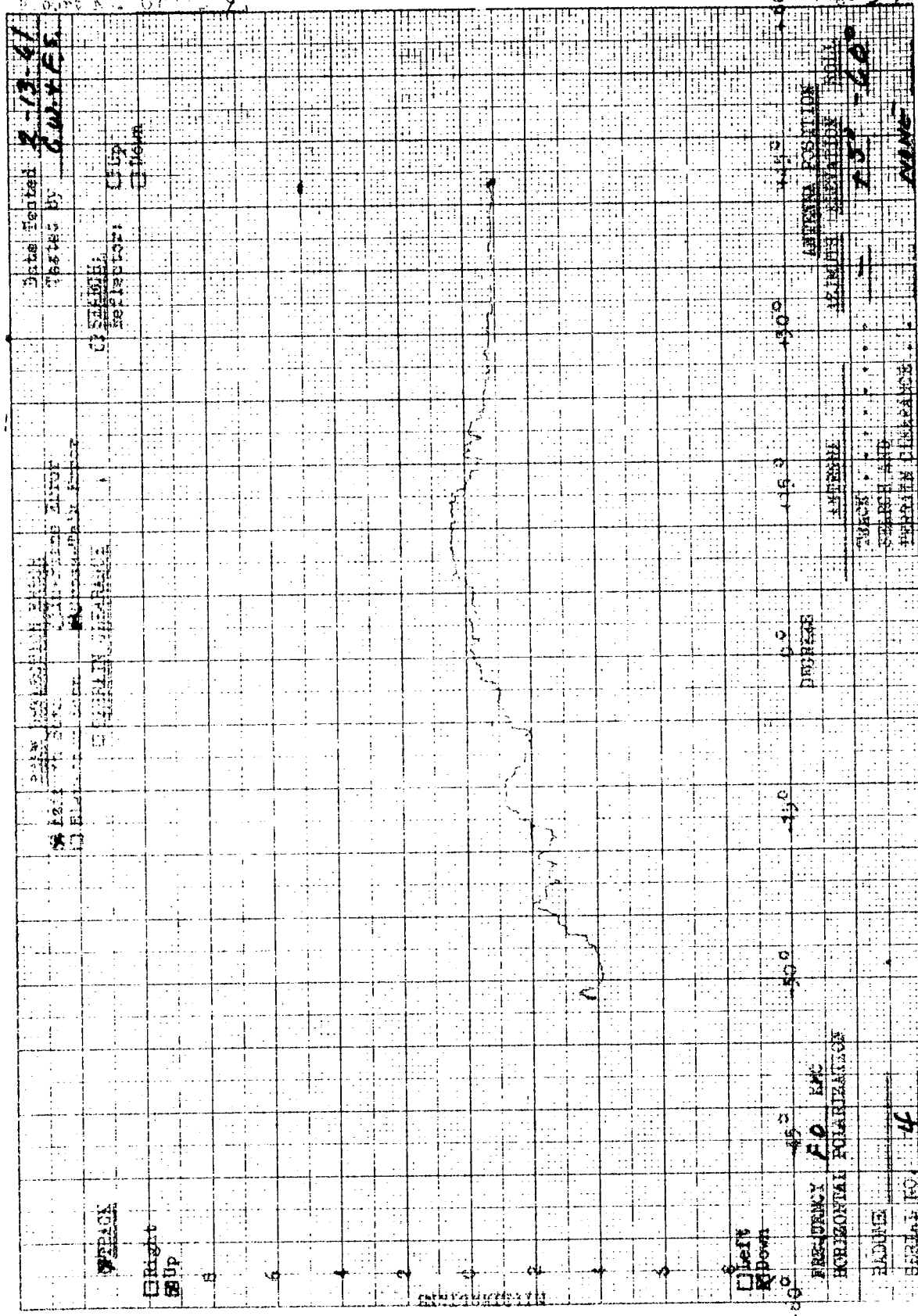
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Date Tested: 2-13-41
Tested By: C. W. F. E.

Reflector: Cup
Reflector: None

PACK

Right
Up

Left
Down

FREQUENCY 0.0 MC
HORIZONTAL POLARIZATION

ADJUNE

SERIAL NO. 4

REFLECTOR

ANTENNA

ANTENNA POSITION
ANTENNA HEIGHT
ANTENNA DIRECTION
ANTENNA DIRECTION

ANTENNA POSITION

ANTENNA HEIGHT

ANTENNA DIRECTION

ANTENNA DIRECTION

ANTENNA DIRECTION

10 X 10 TO THE 1/2 INCH
KODAK SAFETY FILM CO.

[illegible]

10X10 TO THE FINEST 353-110

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Frequency	Horizontal
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100	100

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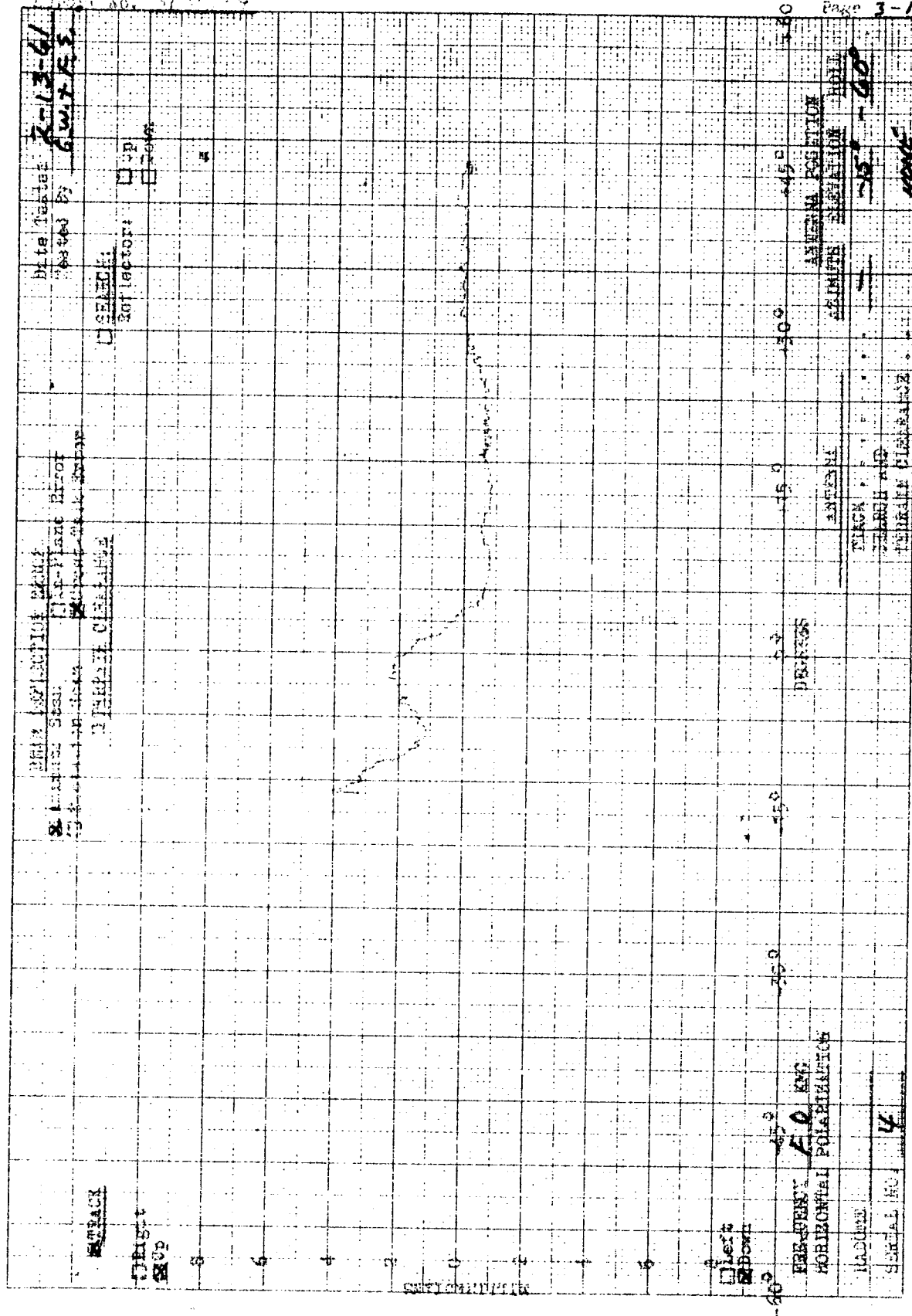
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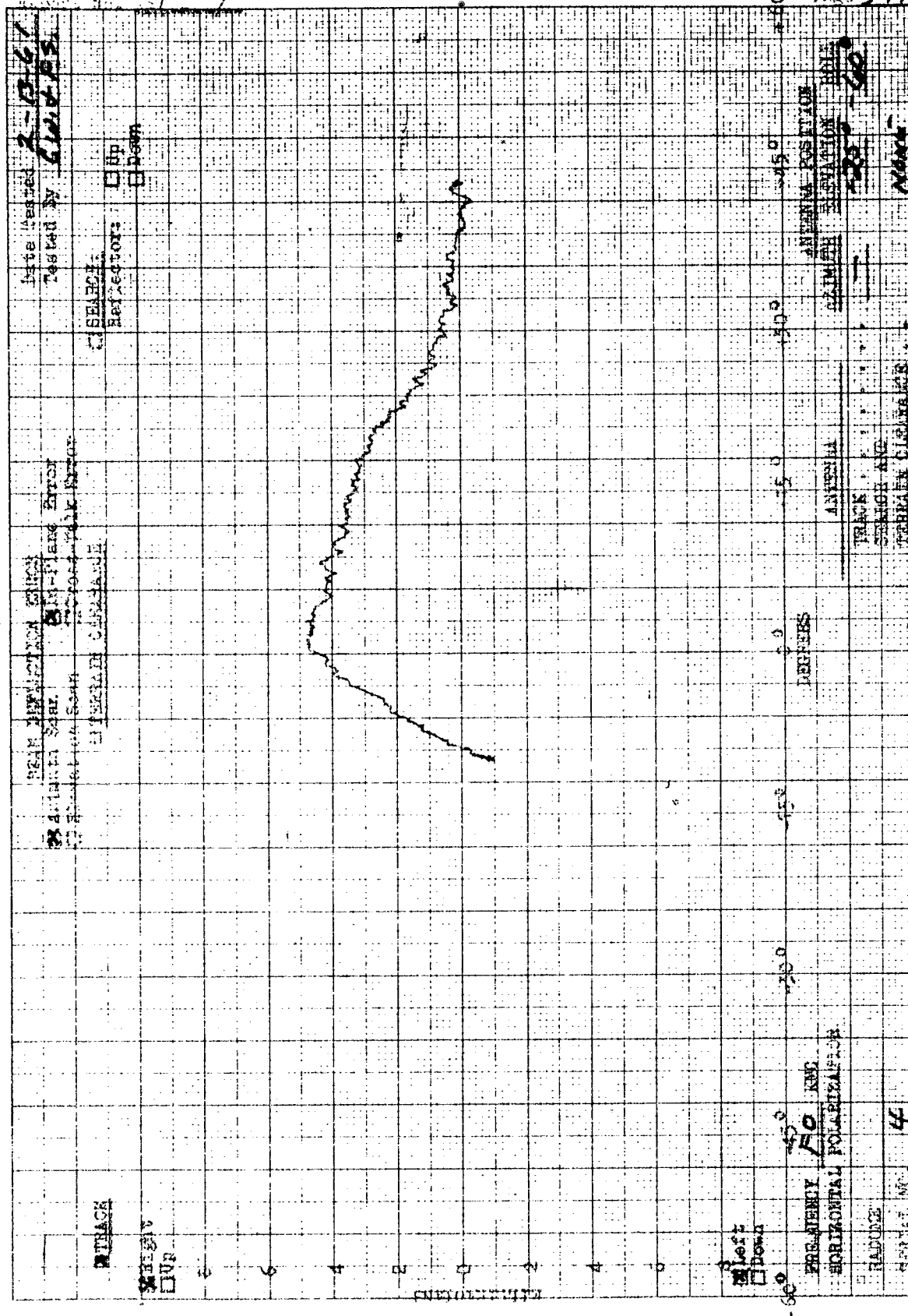
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Date Tested 2-13-61
Tested by C.W. + P.S.

REFLECTOR:	REFLECTOR:
REFLECTOR:	REFLECTOR:

FREQUENCY	FREQ	DEFENSE	ASPECT	ASPECT POSITION
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50	50	150	150	150
100	100	150	150	150
150	150	150	150	150
200	200	150	150	150
250	250	150	150	150
300	300	150	150	150
350	350	150	150	150
400	400	150	150	150
450	450	150	150	150
500	500	150	150	150
550	550	150	150	150
600	600	150	150	150
650	650	150	150	150
700	700	150	150	150
750	750	150	150	150
800	800	150	150	150
850	850	150	150	150
900	900	150	150	150
950	950	150	150	150
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1050	1050	150	150	150
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1700	1700	150	150	150
1750	1750	150	150	150
1800	1800	150	150	150
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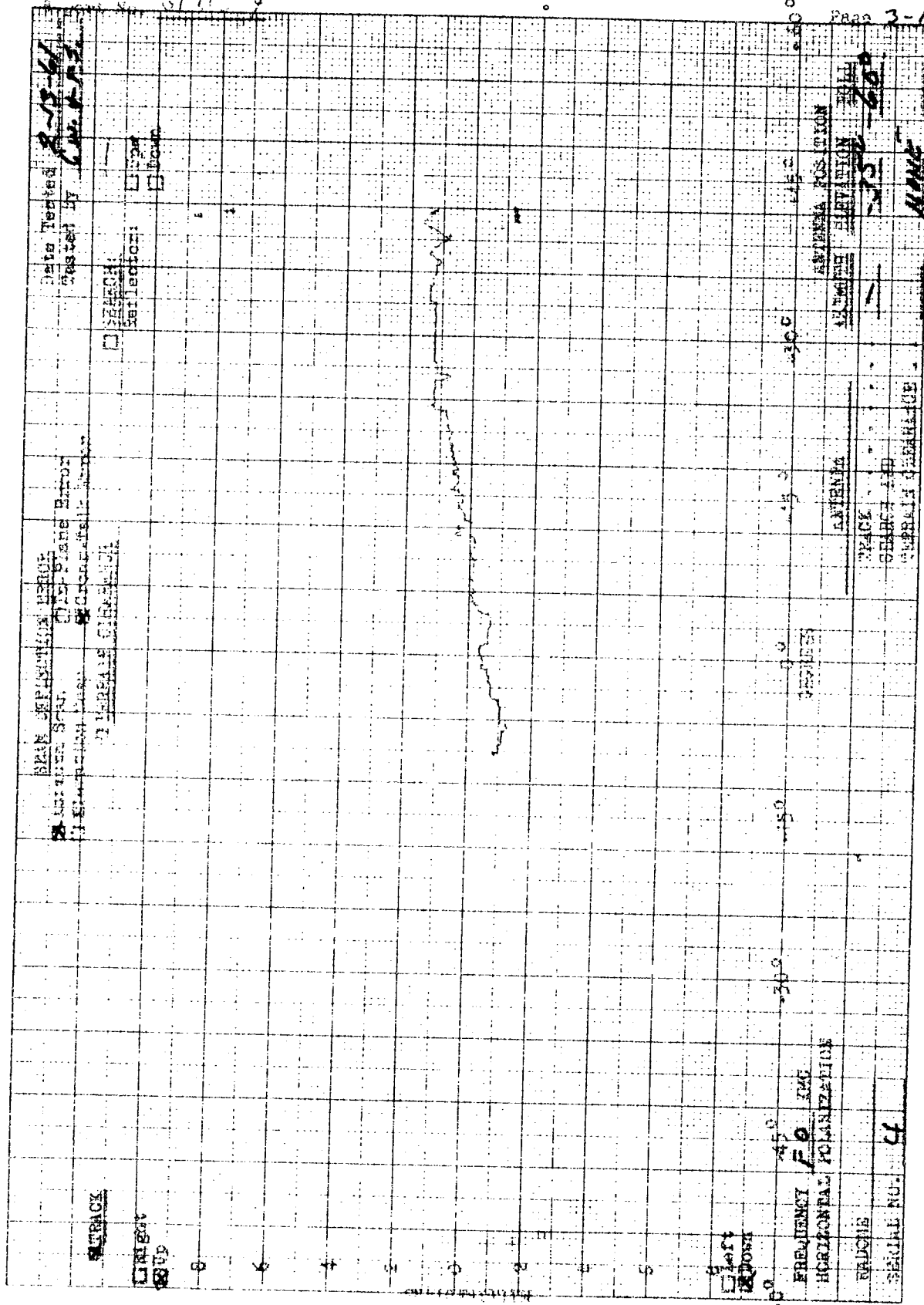
WILLIAM W. CLARK

COLLID POSITION

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EUP

HEIGHT

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FREQUENCY

HORIZONTAL POLARIZATION

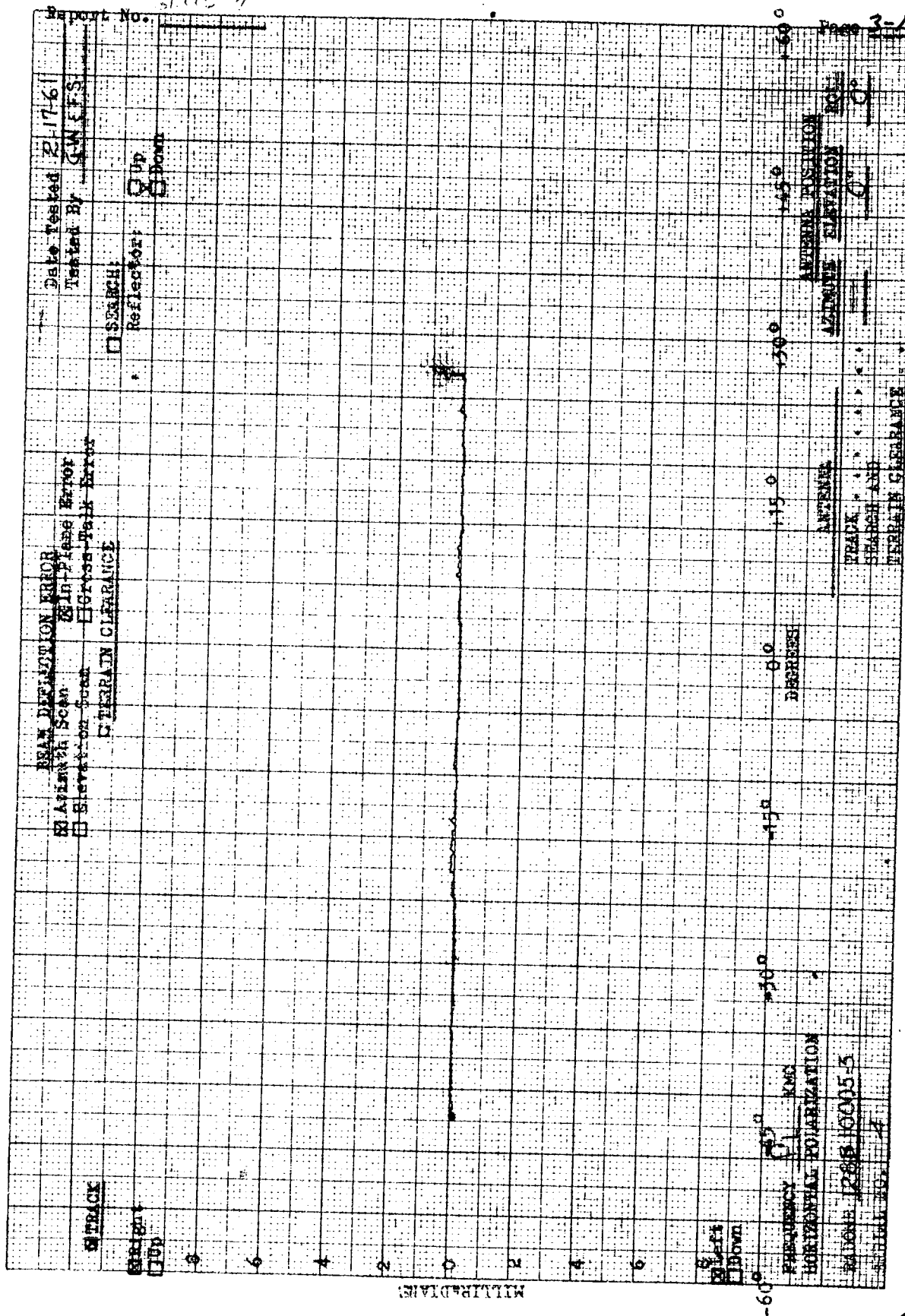
SECTION 37

TRACK BORESIGHT ERROR

FL @ 0° ROLL

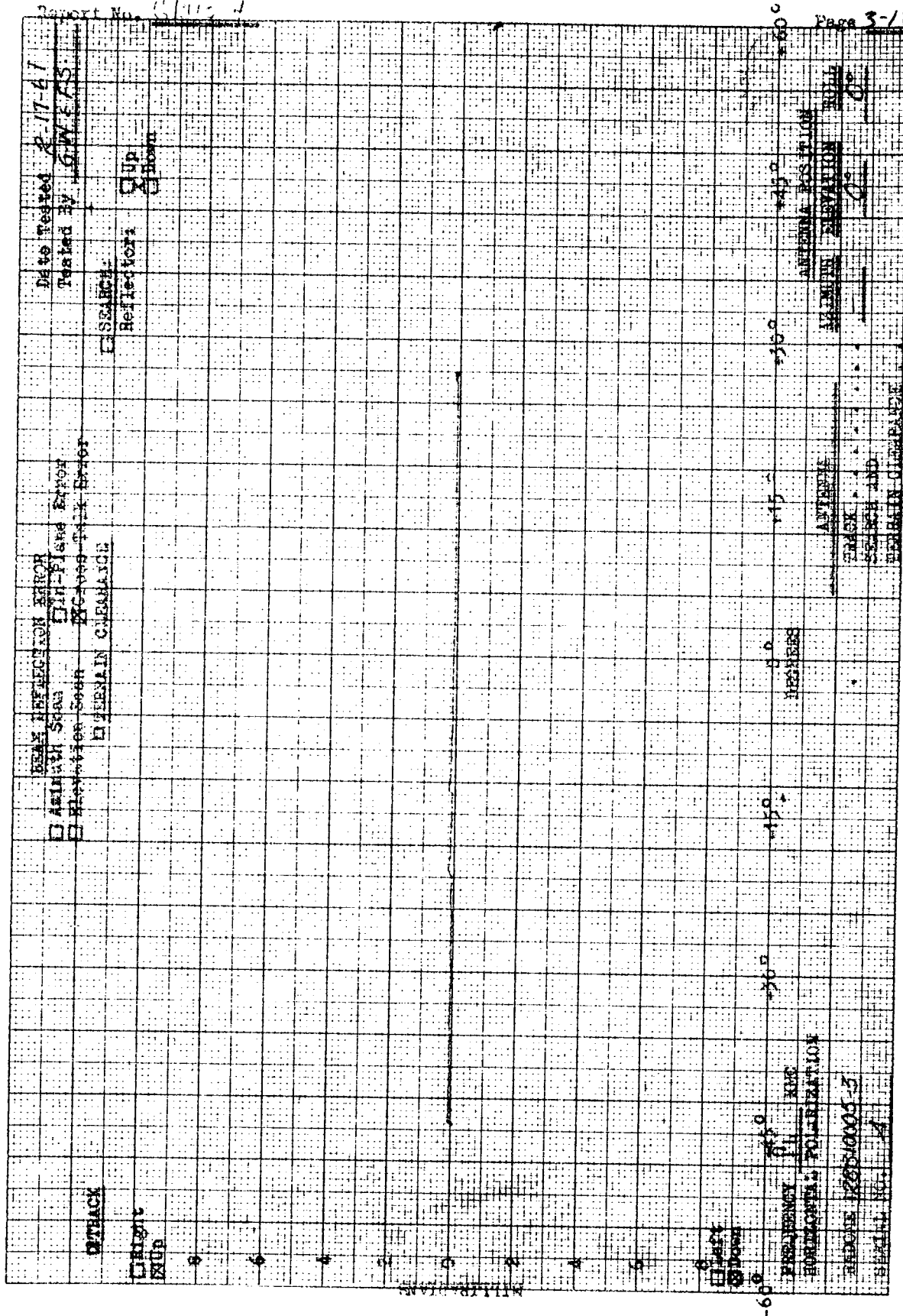
REF: 10X10 TO THE PUNCH 359-110
 RE: A REP. U.S. NAVY

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NO RADOME

10X 10 TO THE 2 INCH 359-116
NEUTRAL REFLECTOR



Date Tested 2-17-47
Tested by G.W.E.S.

SEARCH
Reflector

Up
Down

TRACK

UP
DOWN

FREQUENCY 11 KMC
HORIZONTAL POLARIZATION

RECORD 126510005-3

Serial No. 4

REFLECTOR

ANTENNA

TRACK

SEARCH AND

REFLECTOR

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350

350

ANTENNA POSITION

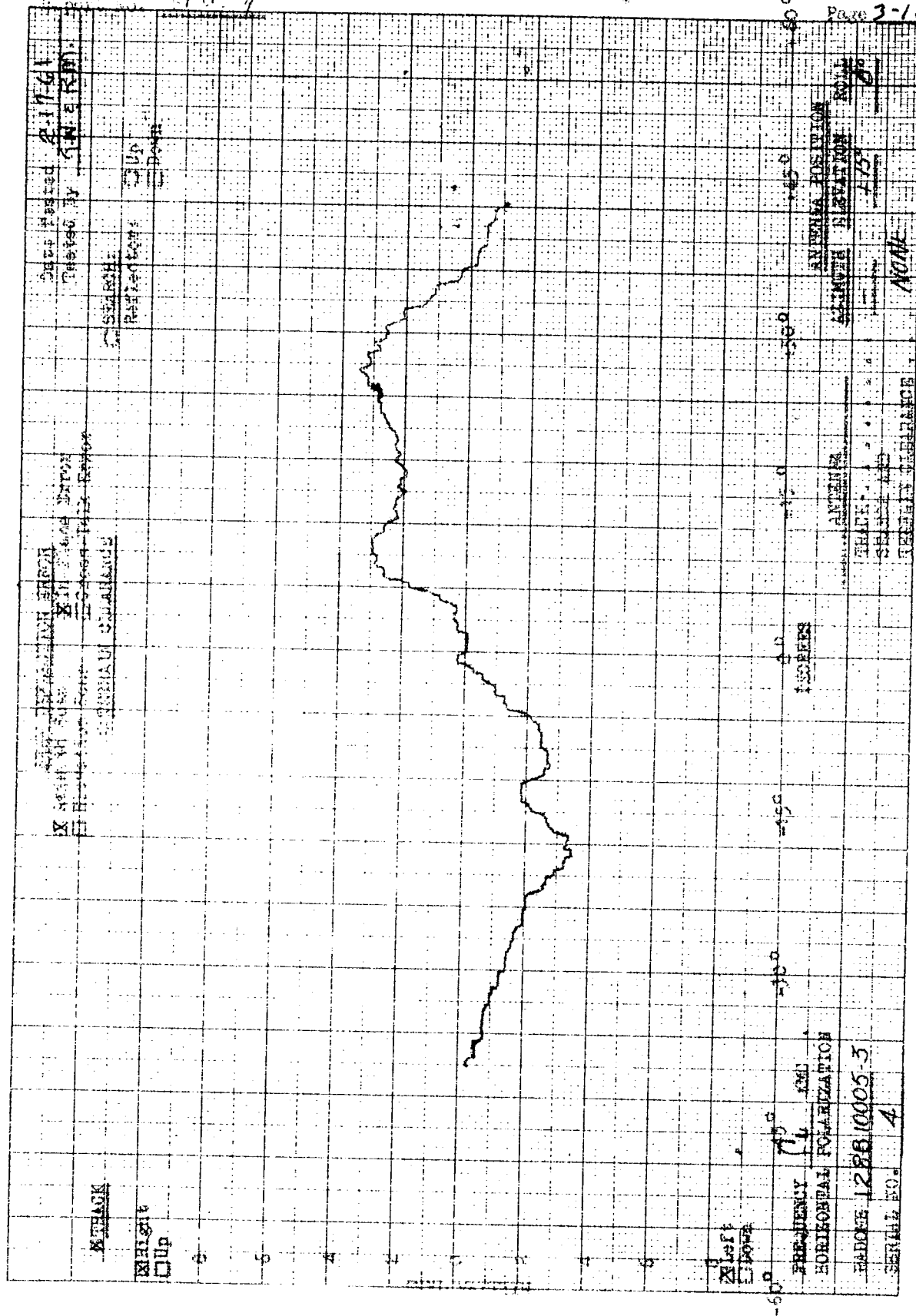
ANTENNA ELEVATION

ROLL

0

NO RADOME

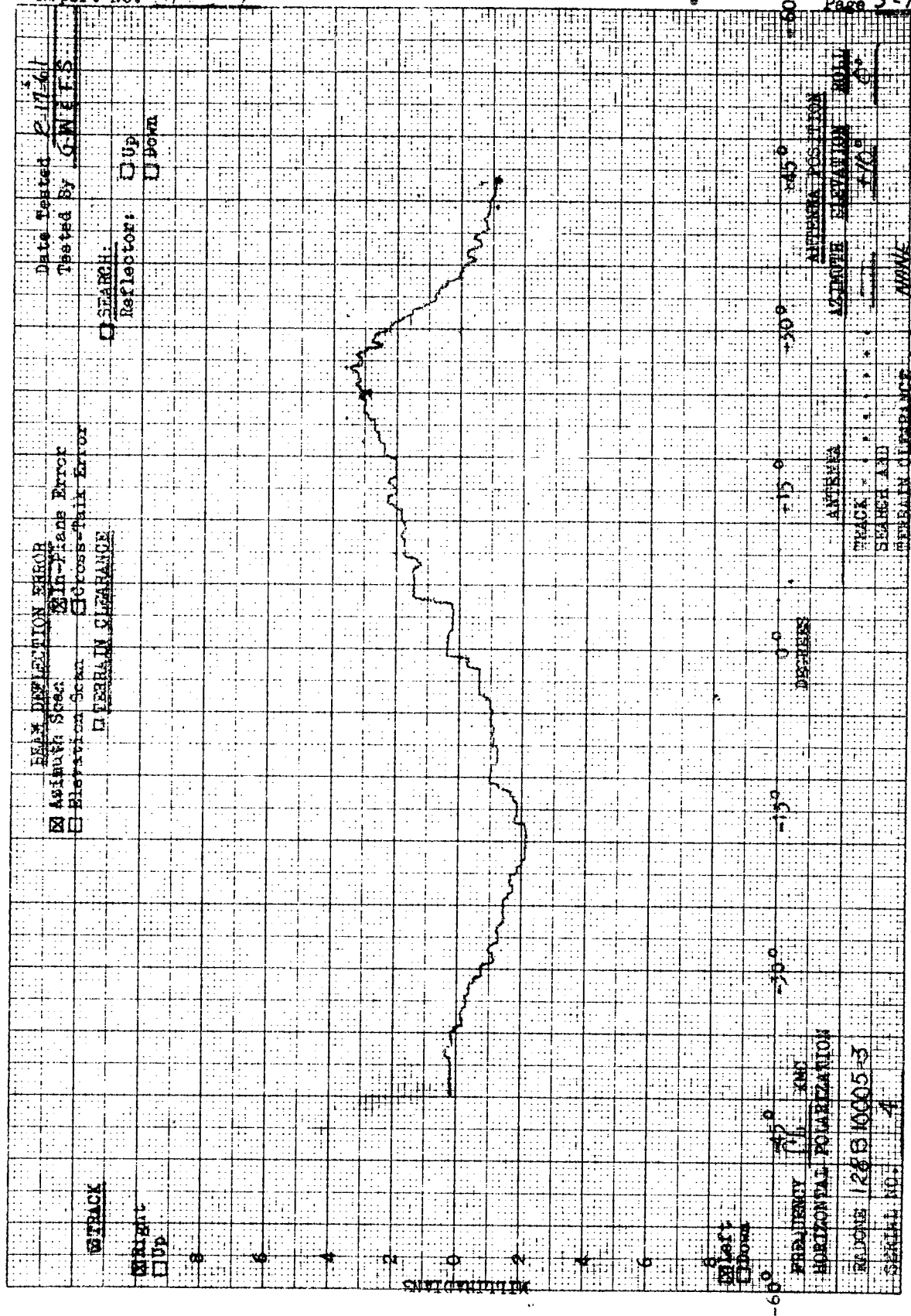
300 F.T.C.



P-E

<input checked="" type="checkbox"/> <u>TRACK</u> <input type="checkbox"/> <u>ORBIT</u> <input type="checkbox"/> <u>EXP</u>		<input checked="" type="checkbox"/> <u>BEAM DEFLECTION ERROR</u> <input type="checkbox"/> <u>Asymmetry Error</u> <input type="checkbox"/> <u>Elevation Error</u> <input type="checkbox"/> <u>Out-of-Plane Error</u> <input type="checkbox"/> <u>Out-of-Focus Error</u> <input type="checkbox"/> <u>Clearance</u>		Date Tested: <u>2/17/61</u> Tested by: <u>G. W. E. F. S.</u> Reflector: <input type="checkbox"/> <u>SEARCH</u> <input type="checkbox"/> <u>DOWN</u>	
FREQUENCY <u>11.1</u> MHz HORIZONTAL POLARIZATION RANGE <u>128 B 10005.5</u> SERIAL NO. <u>4</u>		TRACK AND SEARCH AND DEFLECTION OF TRACK NONE		ANTENNA POSITION ANTENNA ELEVATION <u>0</u> ANTENNA AZIMUTH <u>0</u>	

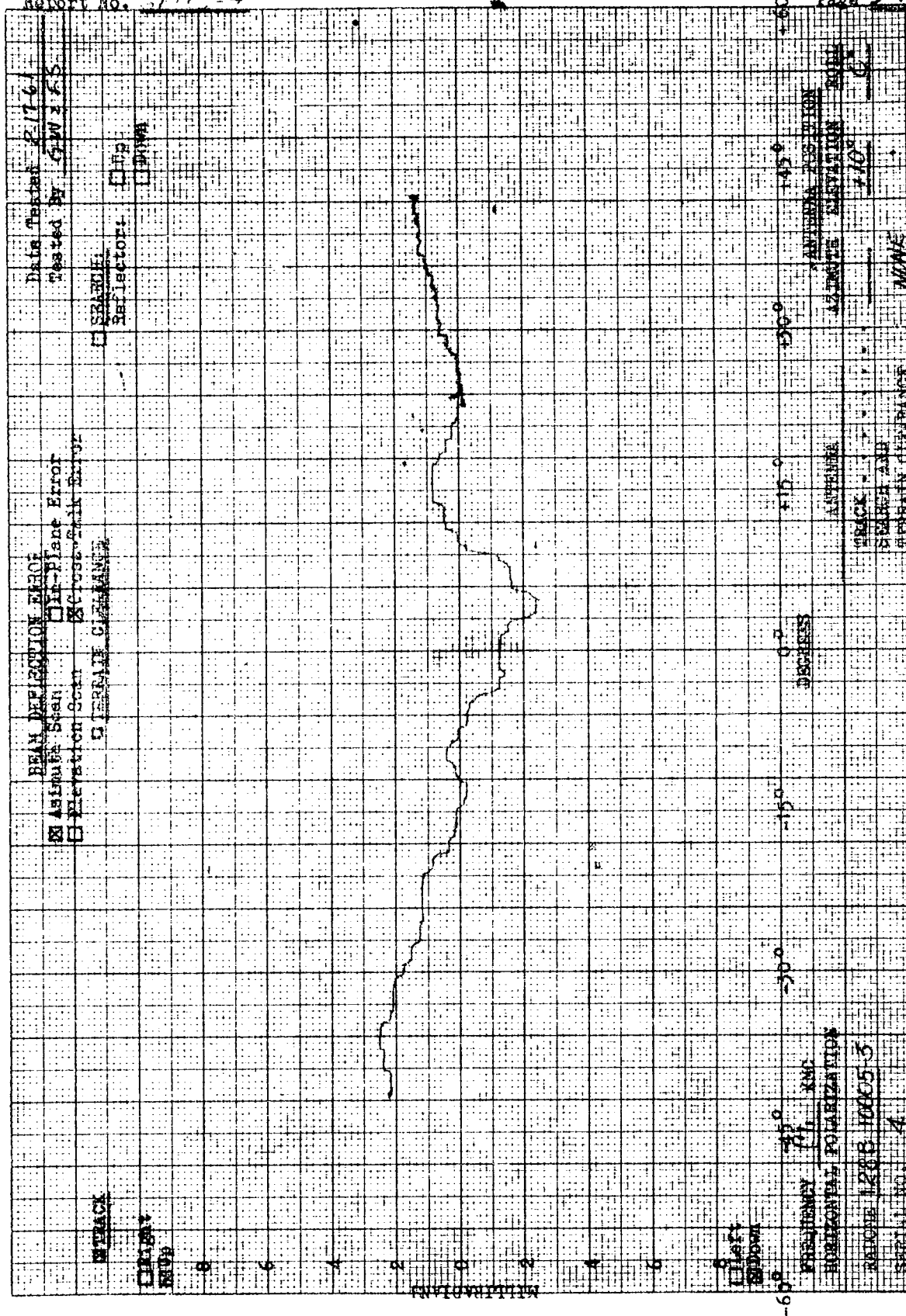
P-E



P-E

Report No. 2/112-4

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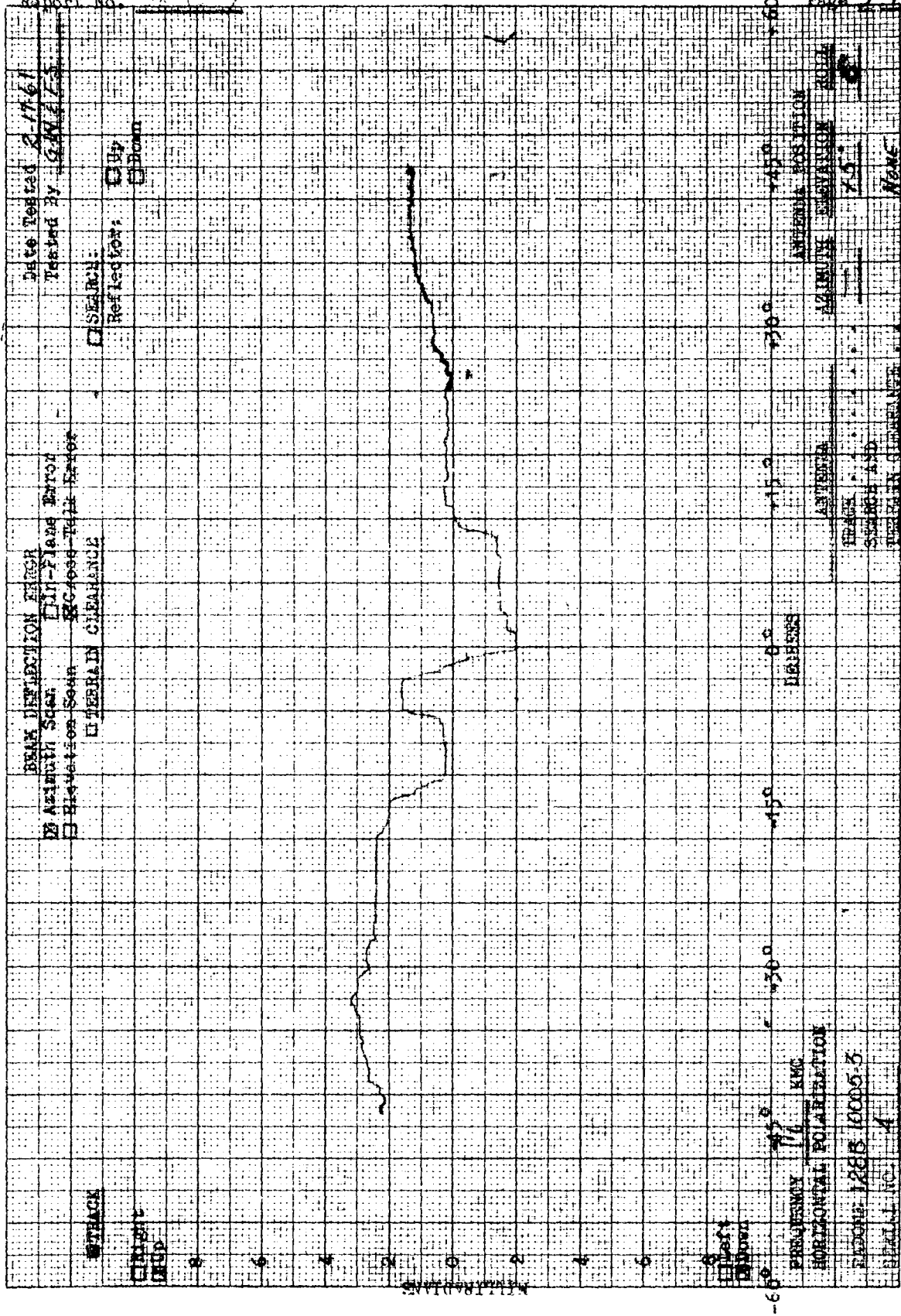


P-E

10X10 TO USE IN 10X10 3500 110
NEW REL'S 1000000

Report No. 2610-4

Page 3-193

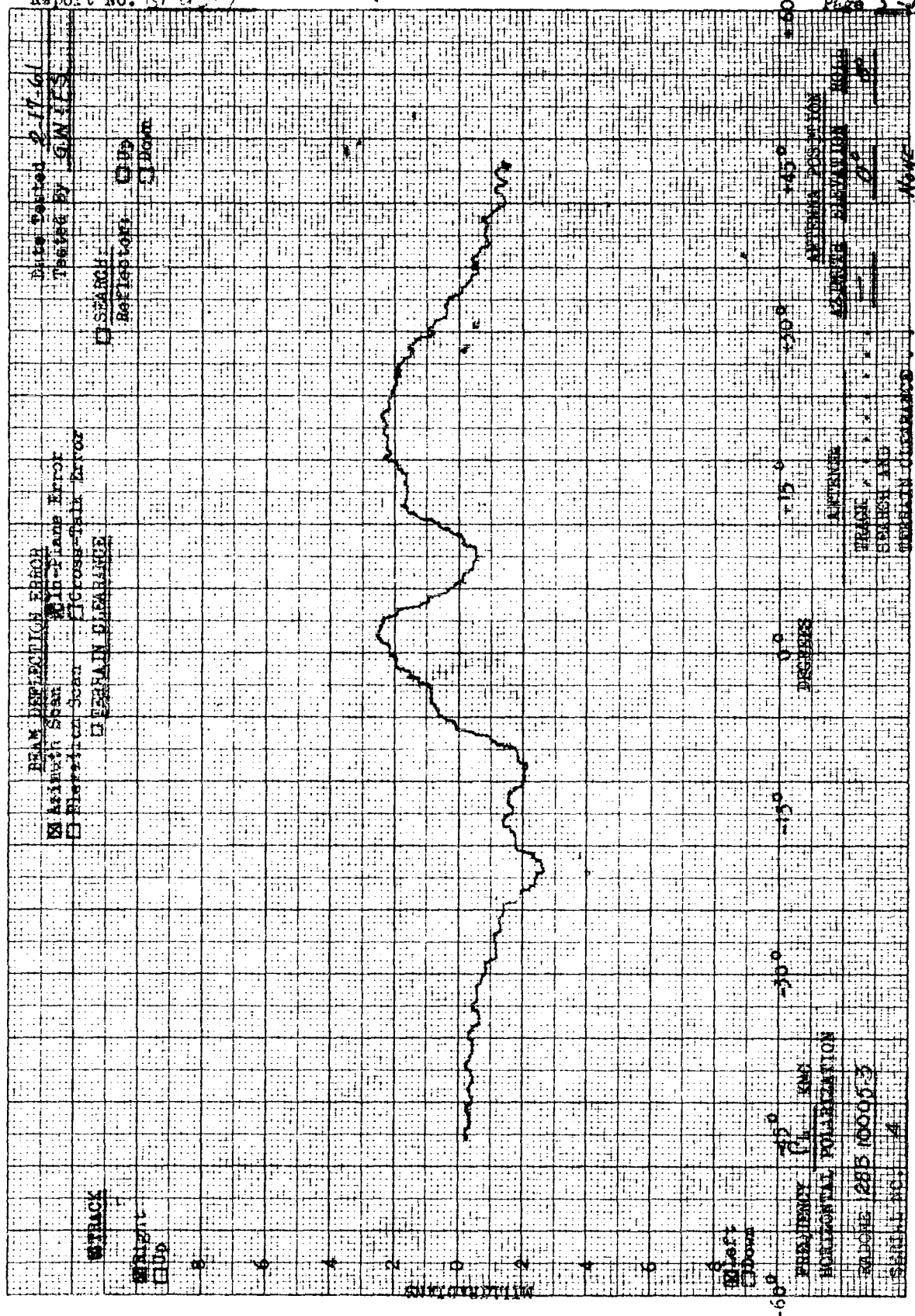


P.E

10X10 TO THE INCH 359-116
AFSC-LL-515-100

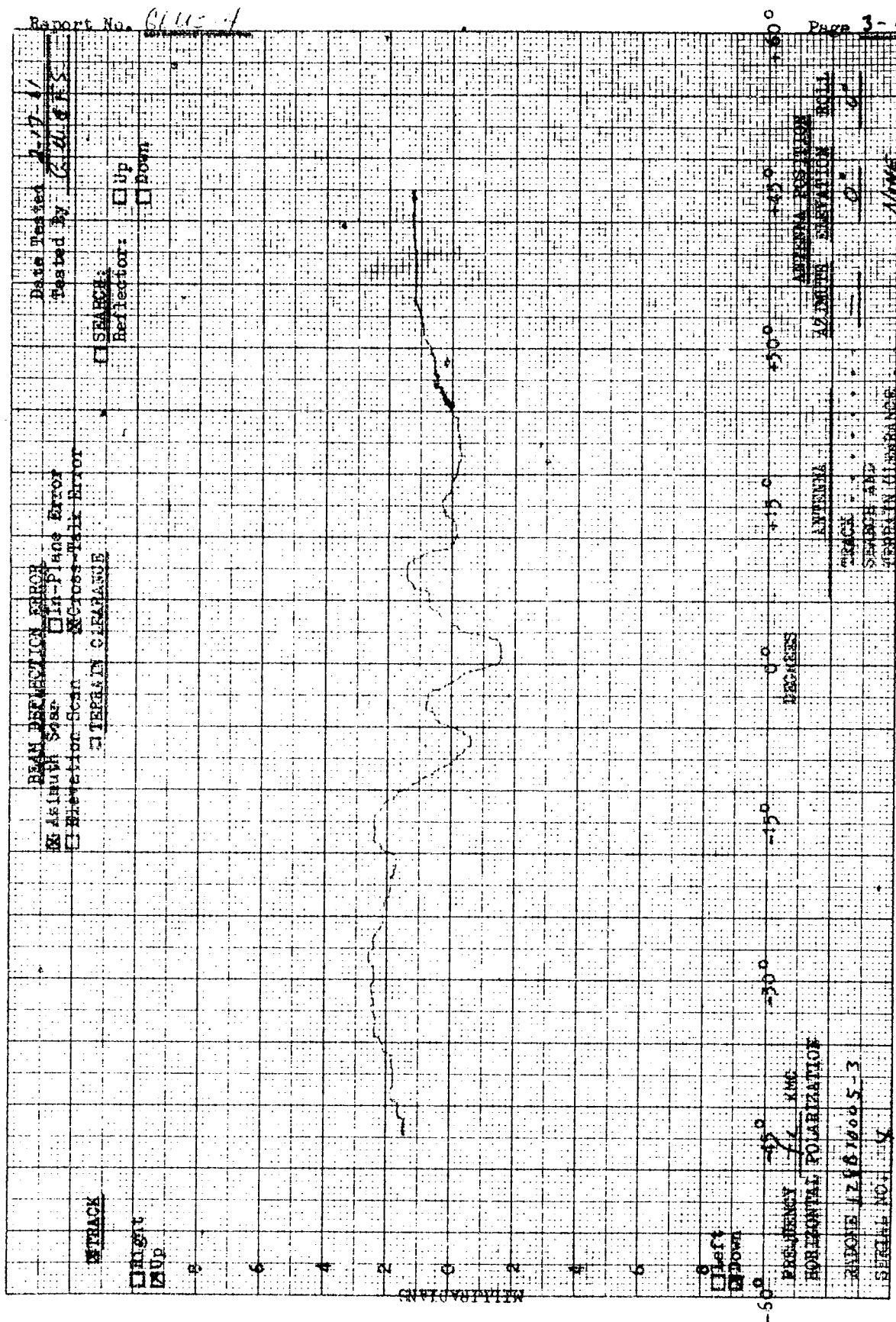
Report No. 61-45-4

Page 3 of 4



P.E

10X10 TO THE 1/2 INCH 350.110



P-E

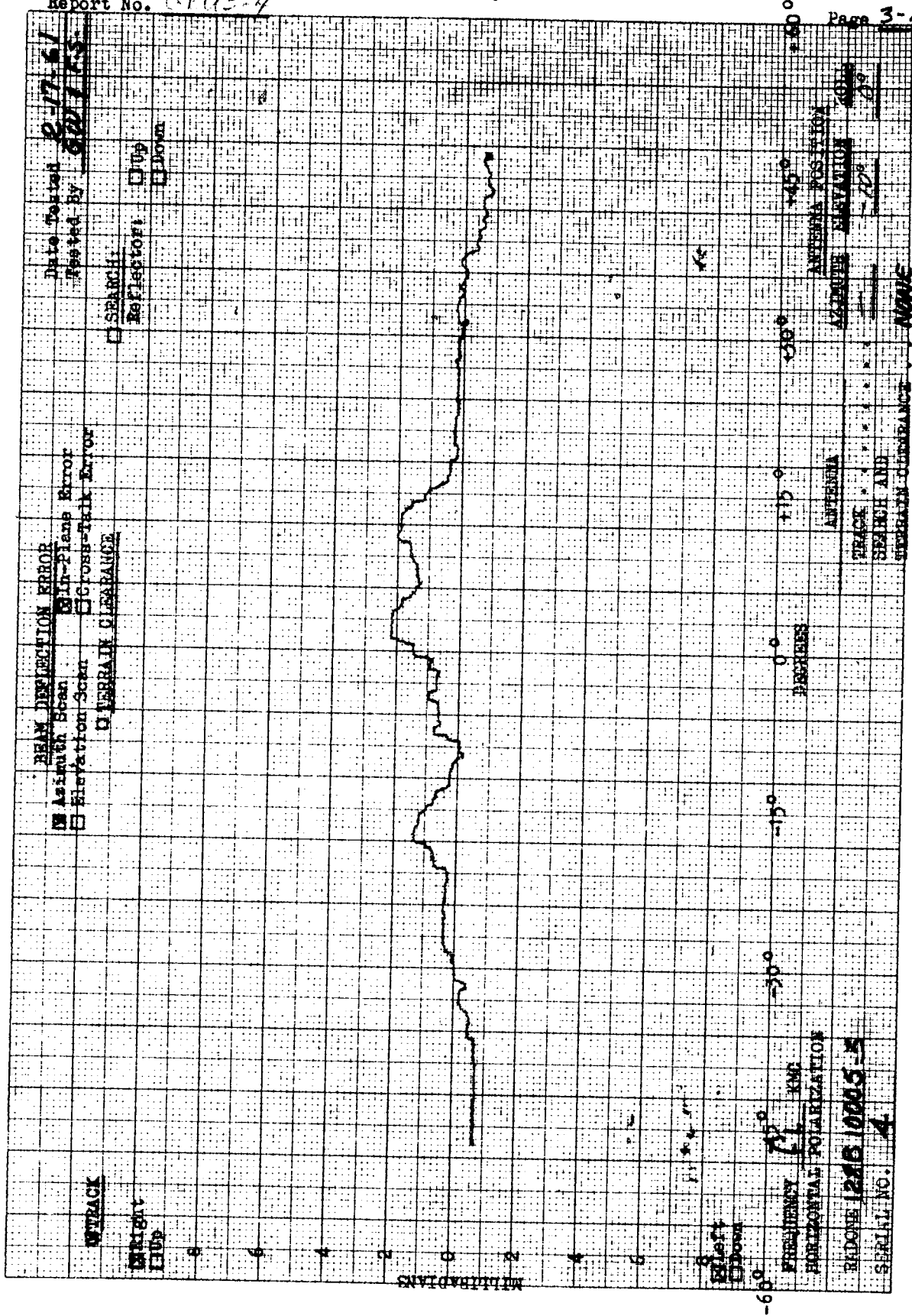
[illegible]

RE

14-00000 TOX TO THE TREN H 359-110

Report No. GMUS-4

Page 3-198



P-E

Report No. 100-100

Date Tested 2-17-61
 Tested By SWC/TS

☐ SEARCH
 Reflector: ☐ Up ☐ Down

BEAM DEFLECTION ERROR
☐ Azimuth Scan ☐ In-Plane Error
☐ Elevation Scan ☐ Gross-Track Error
☐ TERRAIN CLEARANCE

WTRACK

☐ Right
☐ Up

8

6

4

2

0

2

4

6

☐ Left
☐ Down

-60°

45°

30°

15°

0°

15°

30°

45°

60°

FREQUENCY 1.6 KMC
 HORIZONTAL POLARIZATION

RADOME 1283/0005-5

SERIAL NO. 4

DEGREES

ANTENNA

TRACK

SEARCH AND

TERRAIN CLEARANCE

ANTENNA POSITION

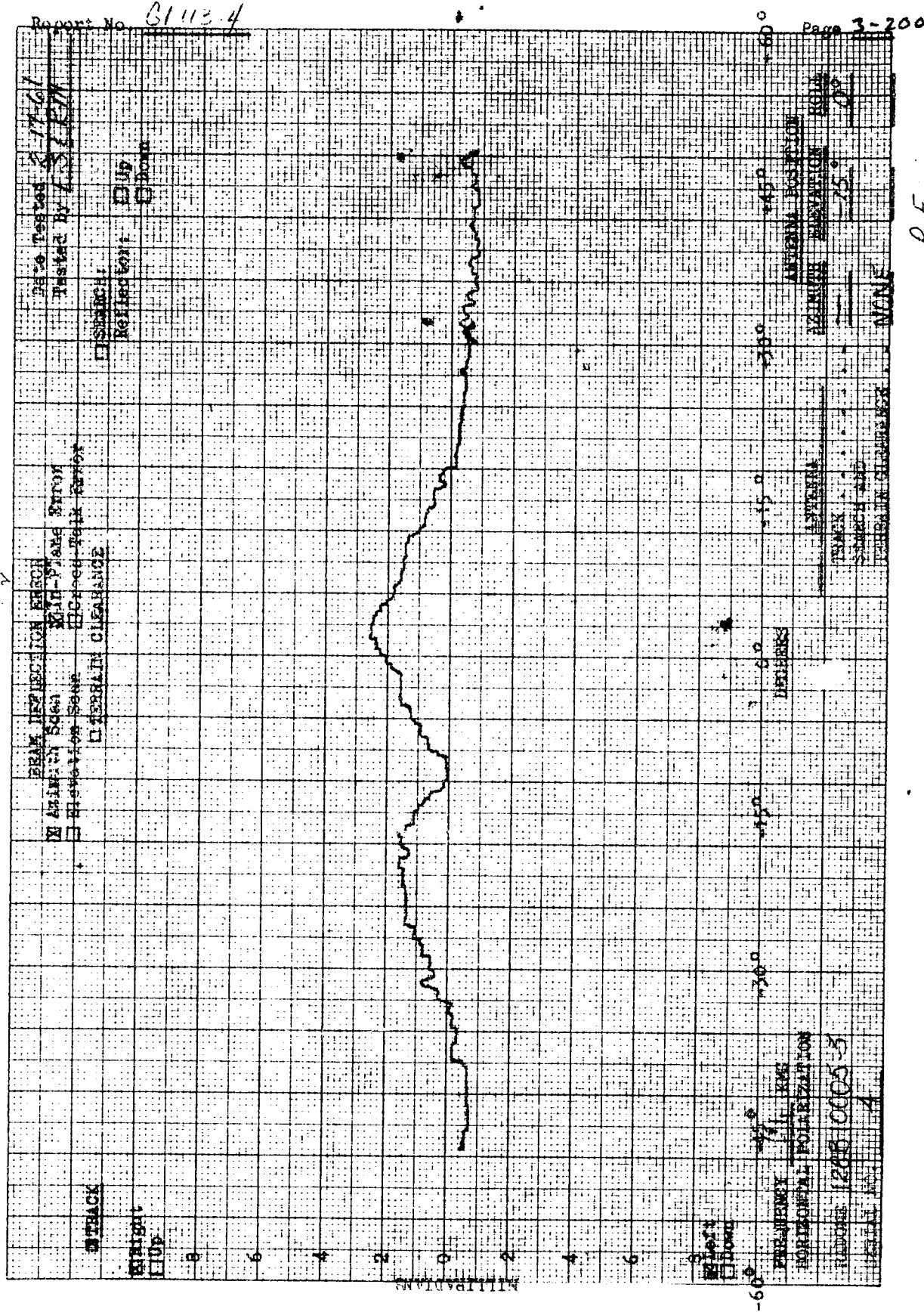
AZIMUTH ELEVATION

BOLT

P.E

2-1-99

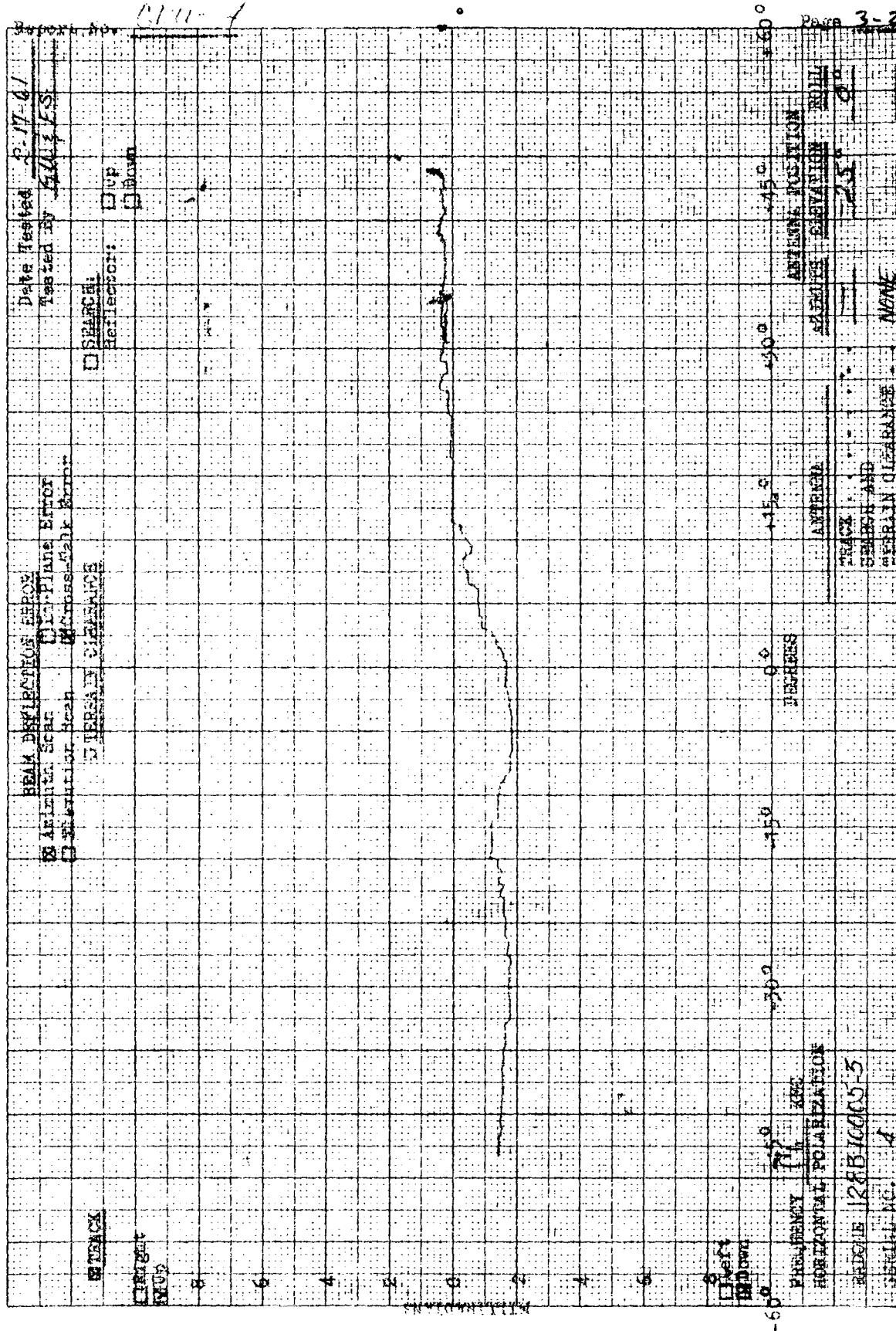
10X10 TO THE INCH 359.116
ALU. L. & S. 400.

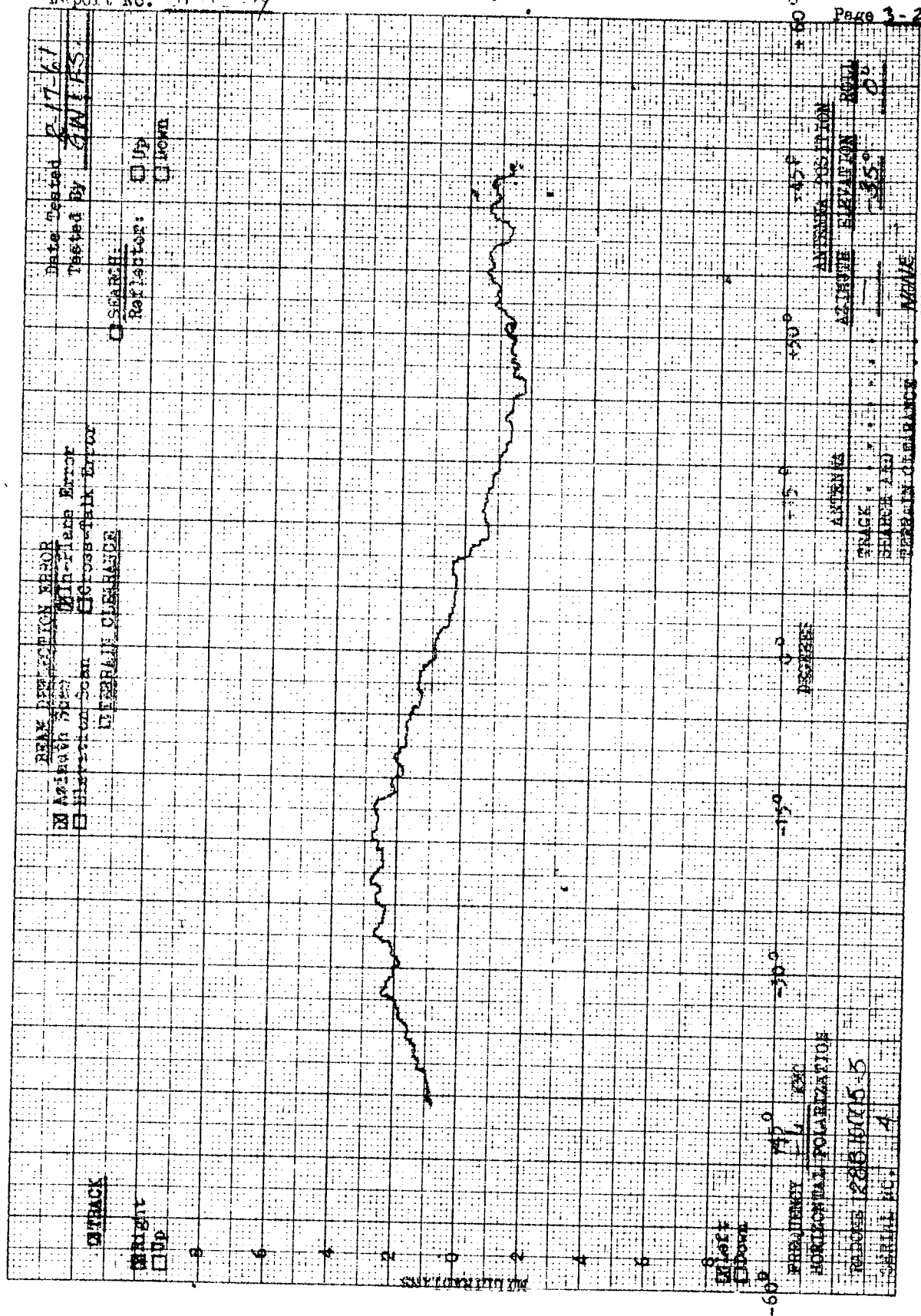


P-E

10X1010 THE 1/2 INCH 359-110

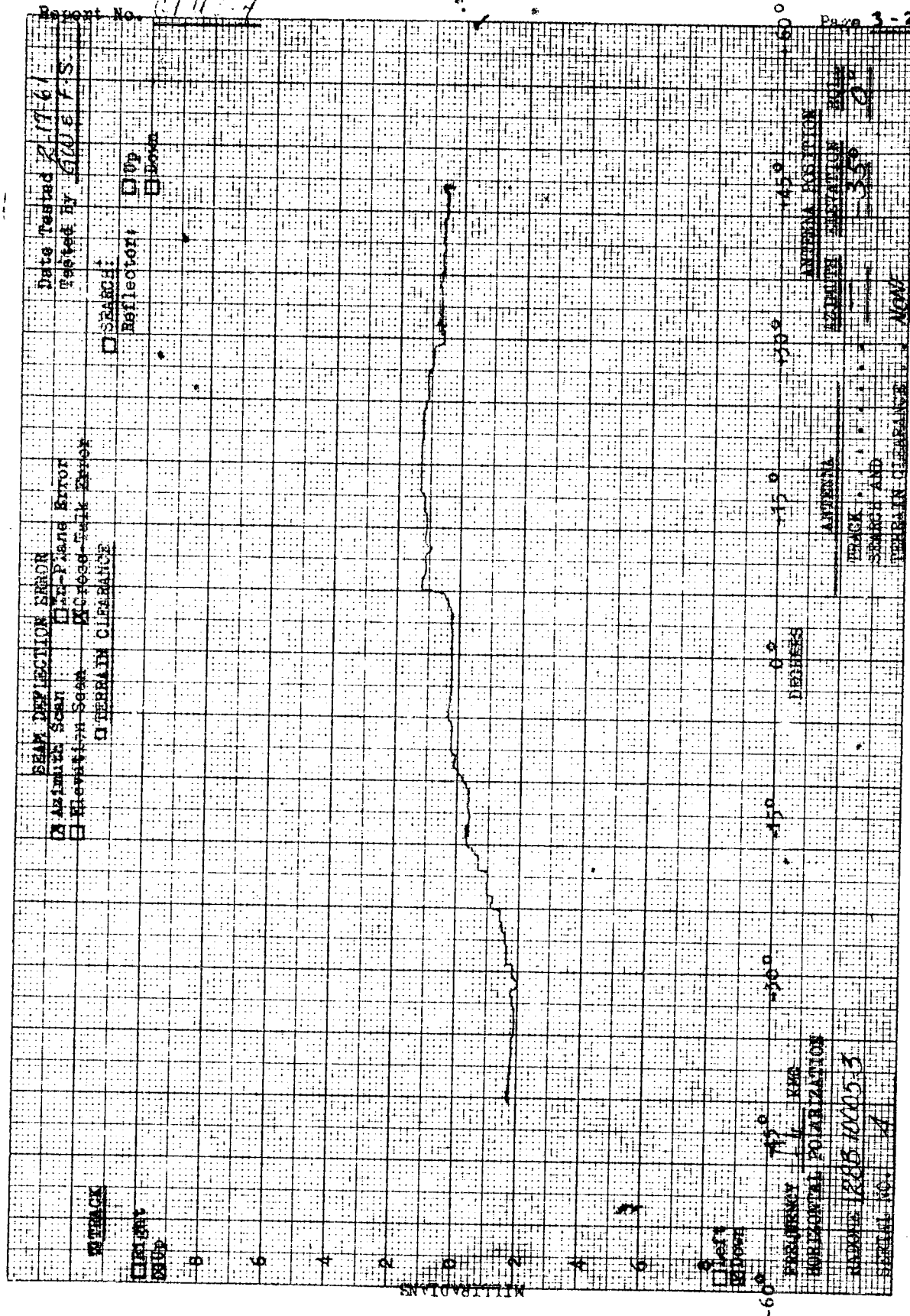
P. E. W.





ρ_E

10X10 POINTS/CINCH 350-110
 10X10 POINTS/CINCH 350-110



Data Section 8-17-61		Section 17		Section 18		Section 19		Section 20		Section 21		Section 22		Section 23		Section 24		Section 25		Section 26		Section 27		Section 28		Section 29		Section 30		Section 31		Section 32		Section 33		Section 34		Section 35		Section 36		Section 37		Section 38		Section 39		Section 40		Section 41		Section 42		Section 43		Section 44		Section 45		Section 46		Section 47		Section 48		Section 49		Section 50		Section 51		Section 52		Section 53		Section 54		Section 55		Section 56		Section 57		Section 58		Section 59		Section 60		Section 61		Section 62		Section 63		Section 64		Section 65		Section 66		Section 67		Section 68		Section 69		Section 70		Section 71		Section 72		Section 73		Section 74		Section 75		Section 76		Section 77		Section 78		Section 79		Section 80		Section 81		Section 82		Section 83		Section 84		Section 85		Section 86		Section 87		Section 88		Section 89		Section 90		Section 91		Section 92		Section 93		Section 94		Section 95		Section 96		Section 97		Section 98		Section 99		Section 100	
Data Section 8-17-61		Section 17		Section 18		Section 19		Section 20		Section 21		Section 22		Section 23		Section 24		Section 25		Section 26		Section 27		Section 28		Section 29		Section 30		Section 31		Section 32		Section 33		Section 34		Section 35		Section 36		Section 37		Section 38		Section 39		Section 40		Section 41		Section 42		Section 43		Section 44		Section 45		Section 46		Section 47		Section 48		Section 49		Section 50		Section 51		Section 52		Section 53		Section 54		Section 55		Section 56		Section 57		Section 58		Section 59		Section 60		Section 61		Section 62		Section 63		Section 64		Section 65		Section 66		Section 67		Section 68		Section 69		Section 70		Section 71		Section 72		Section 73		Section 74		Section 75		Section 76		Section 77		Section 78		Section 79		Section 80		Section 81		Section 82		Section 83		Section 84		Section 85		Section 86		Section 87		Section 88		Section 89		Section 90		Section 91		Section 92		Section 93		Section 94		Section 95		Section 96		Section 97		Section 98		Section 99		Section 100	

P-E

SECTION 3C

TRACK BORESIGHT ERROR

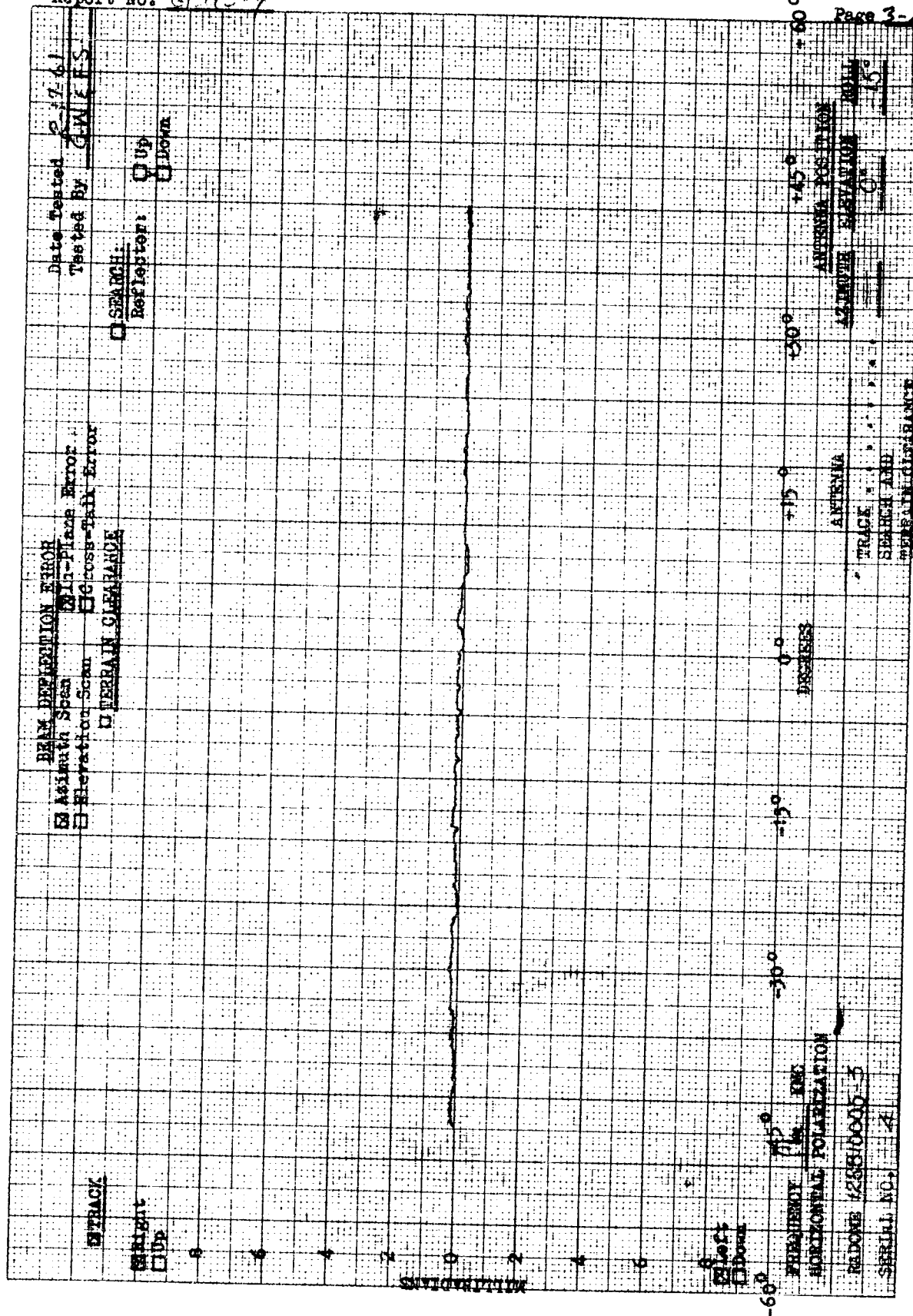
$F_L @ -15^\circ$ ROLL

THE BRUNSWICK-BALKE-COLLENDER COMPANY

10 X 10 TO THE N. INCH 359-116
NEUFFEL & ESSEN CO.

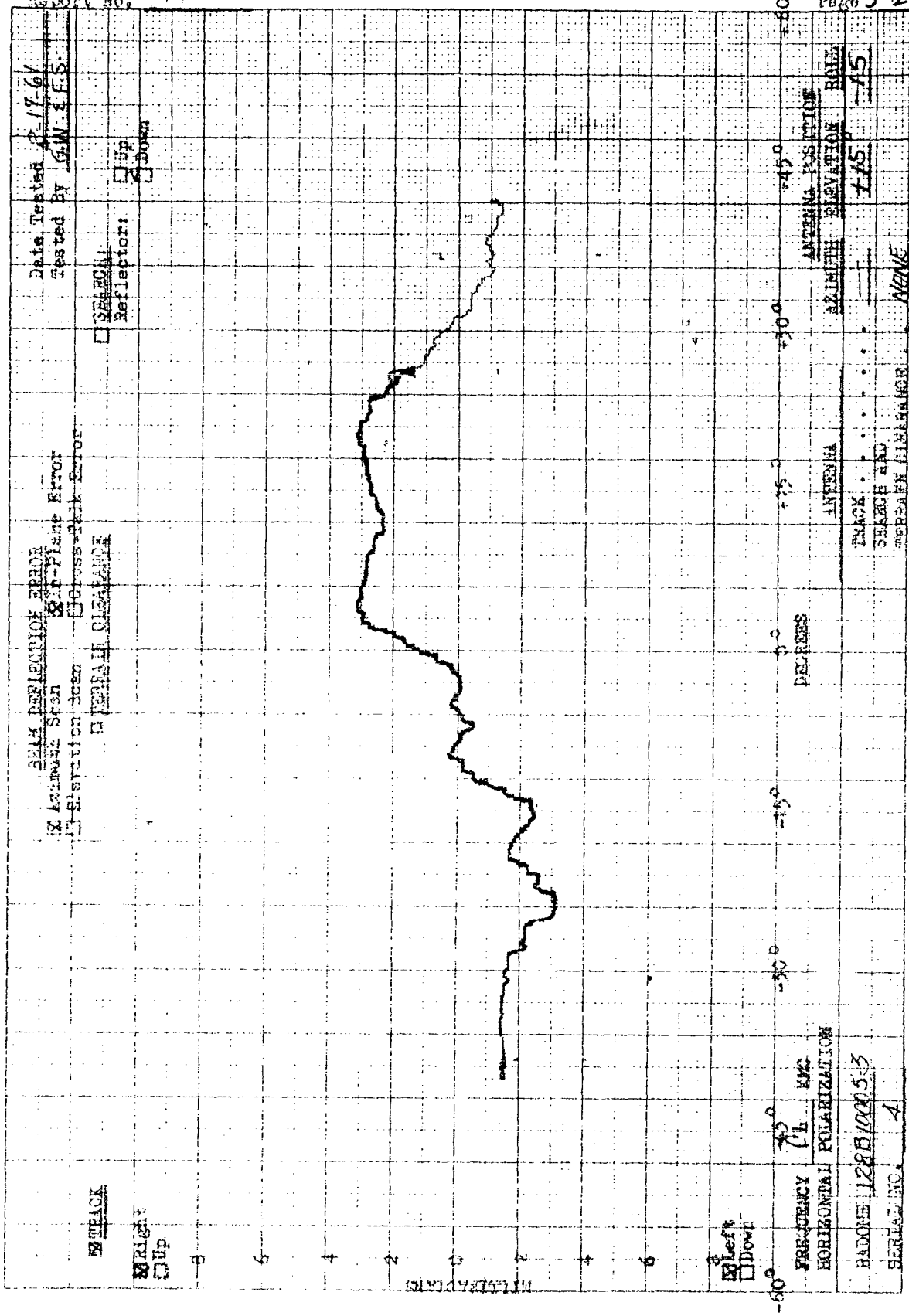
Report No. 6113-7

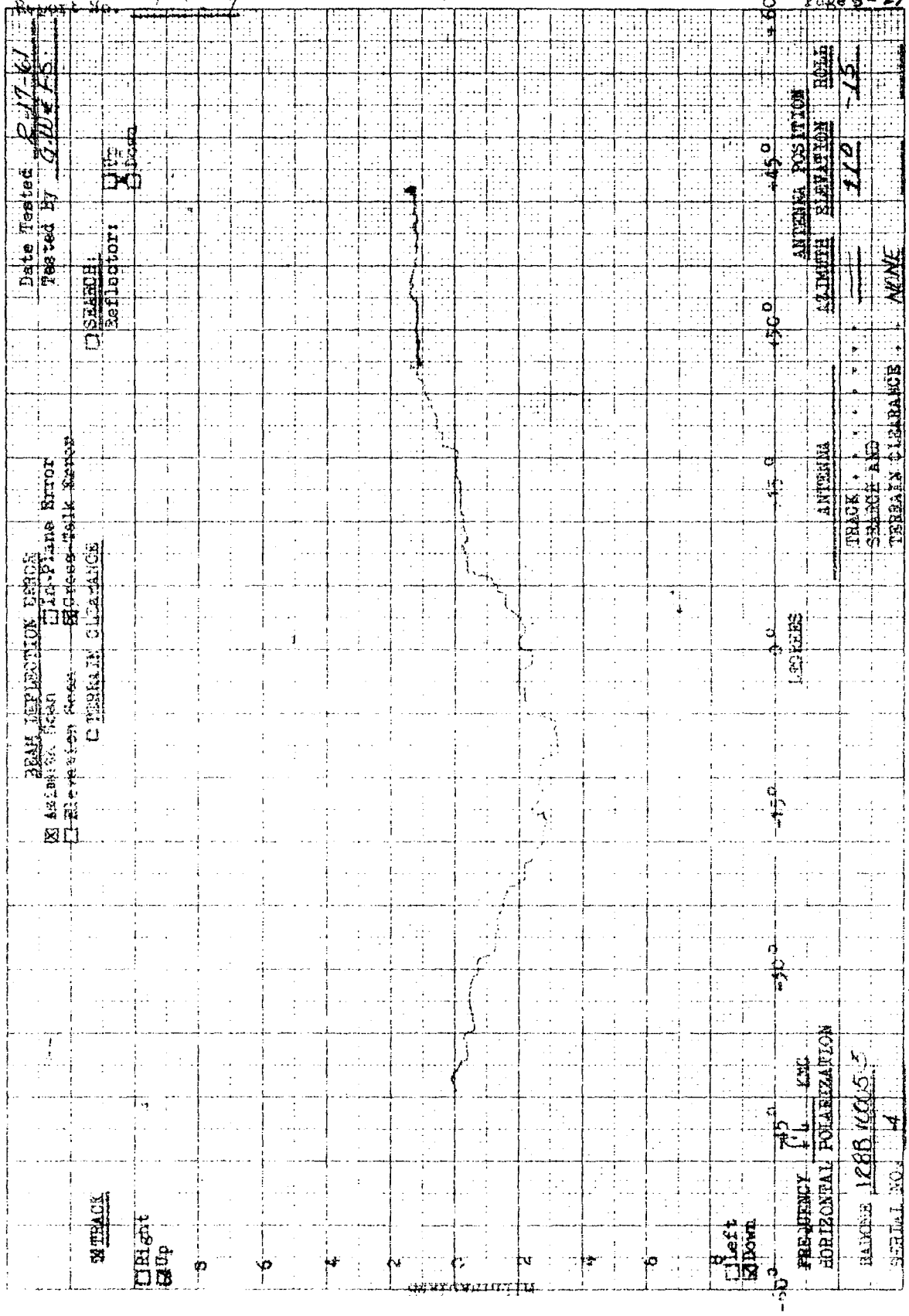
Page 3-209



NO RADOME

NO EPIDEMIE





Date Tested 8-17-61
Tested By G.W. F.S.

BEAM REFLECTION DESIGN
☒ Azimuth Error
☐ Elevation Error
☐ In-Plane Error
☐ Out-of-Plane Error
☐ Terrain Clearance

Reflector: DISK
DISK

WINDBACK

Upright
Up

Left
Down

FREQUENCY 7.1 KMC
HORIZONTAL POLARIZATION

NAME 1288 0005-5

SERIAL NO. 4

LOOKERS

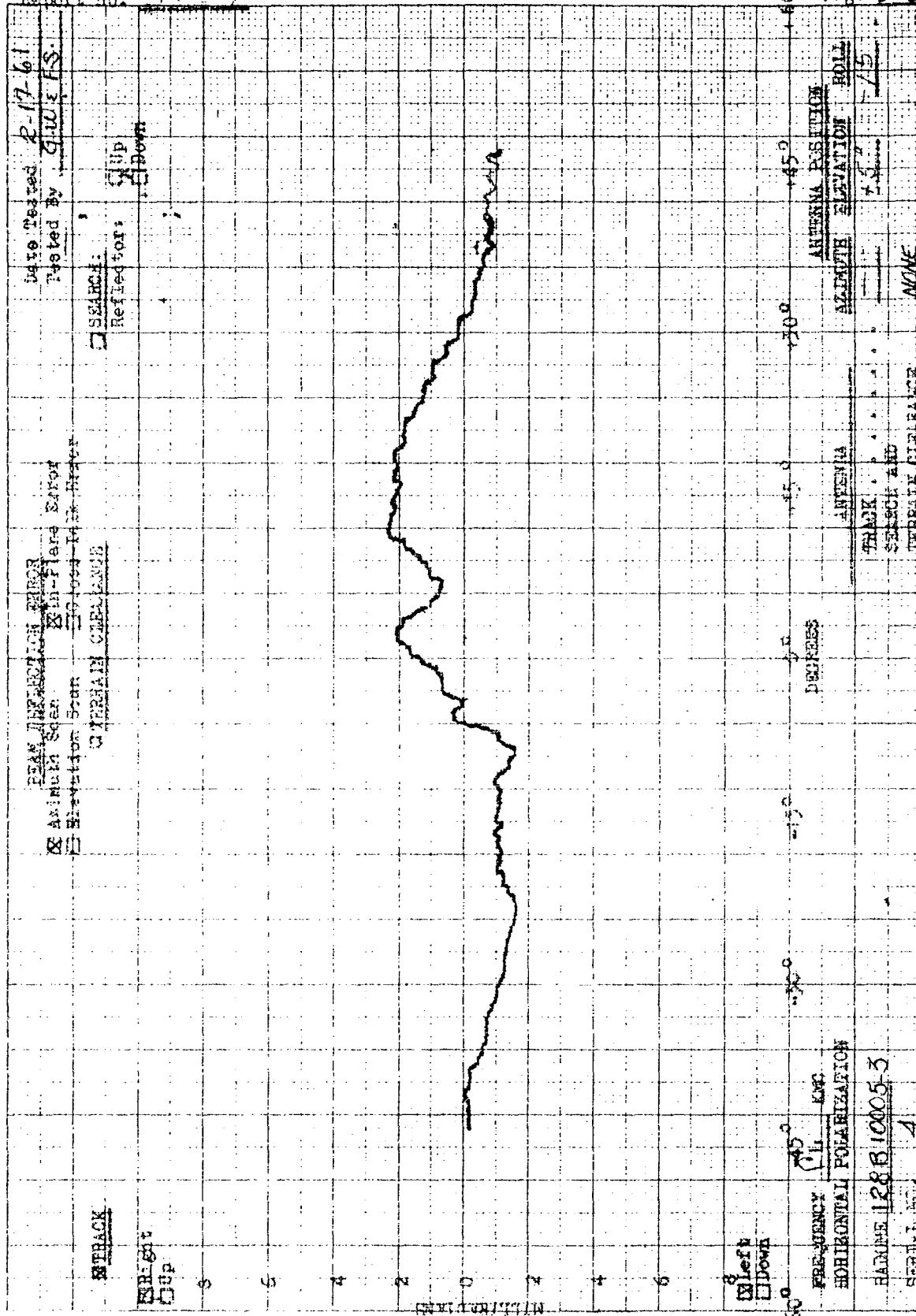
ANTENNA

TRACK SEARCH AND
CLEARANCE

ANTENNA POSITION
AZIMUTH ELEVATION HOLD

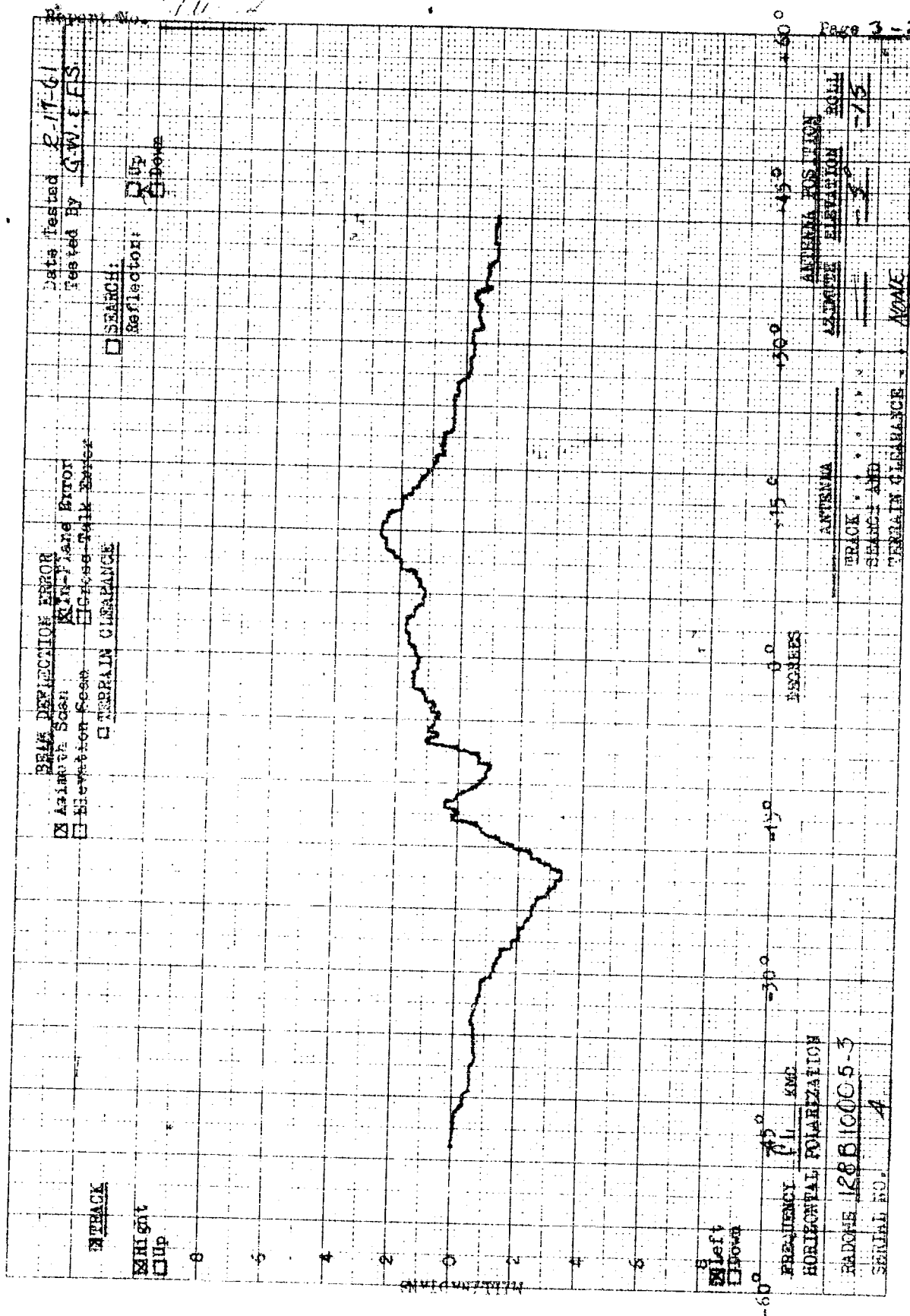
110 -15

NAME

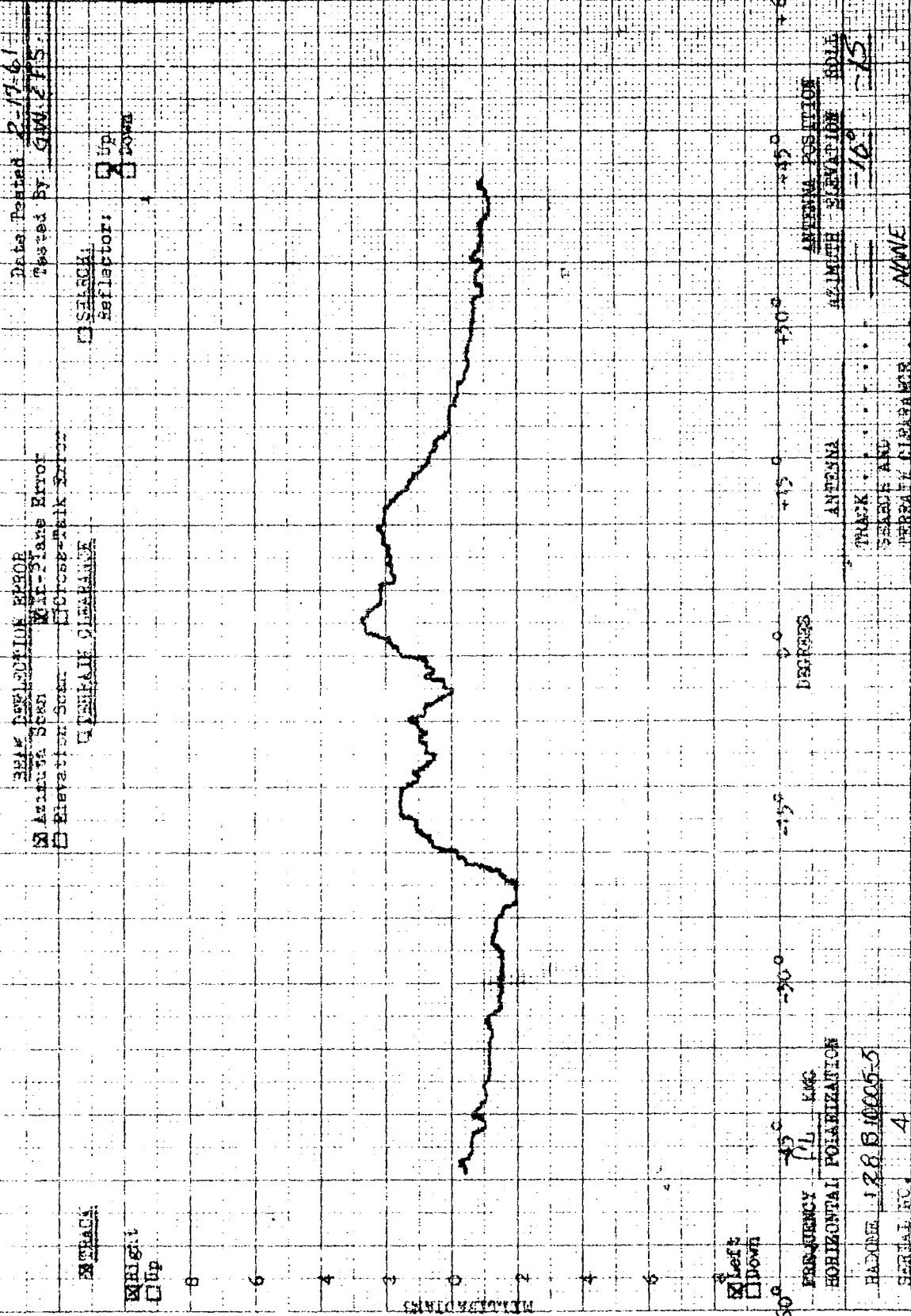


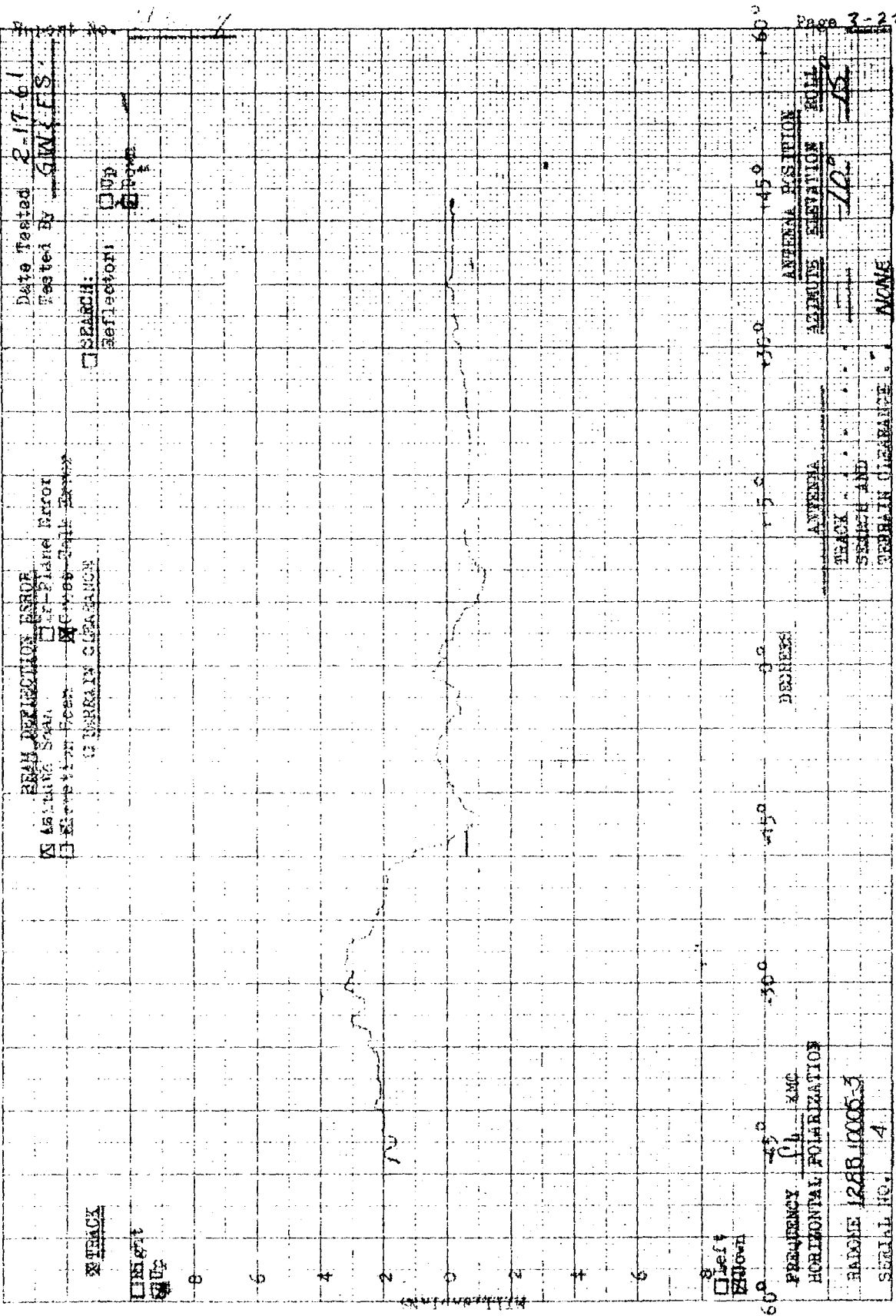
DATE RECEIVED 12/17/66		DATE OF 12/17/66	
NAME [Blank]		NAME [Blank]	
ADDRESS [Blank]		ADDRESS [Blank]	
CITY [Blank]		CITY [Blank]	
STATE [Blank]		STATE [Blank]	
ZIP [Blank]		ZIP [Blank]	
PHONE [Blank]		PHONE [Blank]	
OCCASION [Blank]		OCCASION [Blank]	
COMMENTS [Blank]		COMMENTS [Blank]	
SIGNATURE [Blank]		SIGNATURE [Blank]	
DATE [Blank]		DATE [Blank]	
TIME [Blank]		TIME [Blank]	
LOCATION [Blank]		LOCATION [Blank]	
WEATHER [Blank]		WEATHER [Blank]	
MOON [Blank]		MOON [Blank]	
STARS [Blank]		STARS [Blank]	
PLANETS [Blank]		PLANETS [Blank]	
METEORS [Blank]		METEORS [Blank]	
COMETS [Blank]		COMETS [Blank]	
AURORA [Blank]		AURORA [Blank]	
OTHER [Blank]		OTHER [Blank]	

ρ_F



RAY DEFLECTION FROM <input checked="" type="checkbox"/> Azimuth Scan <input type="checkbox"/> Elevation Scan <input checked="" type="checkbox"/> Cross-Hair Error <input type="checkbox"/> Terrain Clearance		Date Tested <u>2-17-61</u> Tested By <u>G.W. FES</u>	
SEARCH: Reflector: <input type="checkbox"/> Up <input checked="" type="checkbox"/> Down			
TRACK <input type="checkbox"/> Right <input checked="" type="checkbox"/> Up			
FREQUENCY <u>11</u> KMC. HORIZONTAL POLARIZATION		ANTENNA POSITION AZIMUTH <u>150</u> ELEVATION <u>45</u>	
HADRA <u>1288 100053</u>		TRACK SERGE AND TERRAIN CLEARANCE <u>NONE</u>	
SERIAL NO. <u>4</u>			





Date Tested 2-17-61
Tested By G.W. F.S.

SEARCH: ☐ Reflector: ☐ ☒ Beam

BEAM DEFLECTION ERROR
☒ Azimuth Error
☐ Elevation Error
☒ Elevation Error
☐ Terrain Clearance

TRACK

REFLECTOR

DB

0

2

4

6

8

10

12

14

16

18

20

22

24

26

28

☐ Left
☐ Right

FREQUENCY 14.2 MC
HORIZONTAL POLARIZATION

RANGE 1280.0000-3

SERIAL NO. 4

DEGREES

ANTENNA

TRACK AND

SEARCH AND

TERRAIN CLEARANCE

ANTENNA POSITION

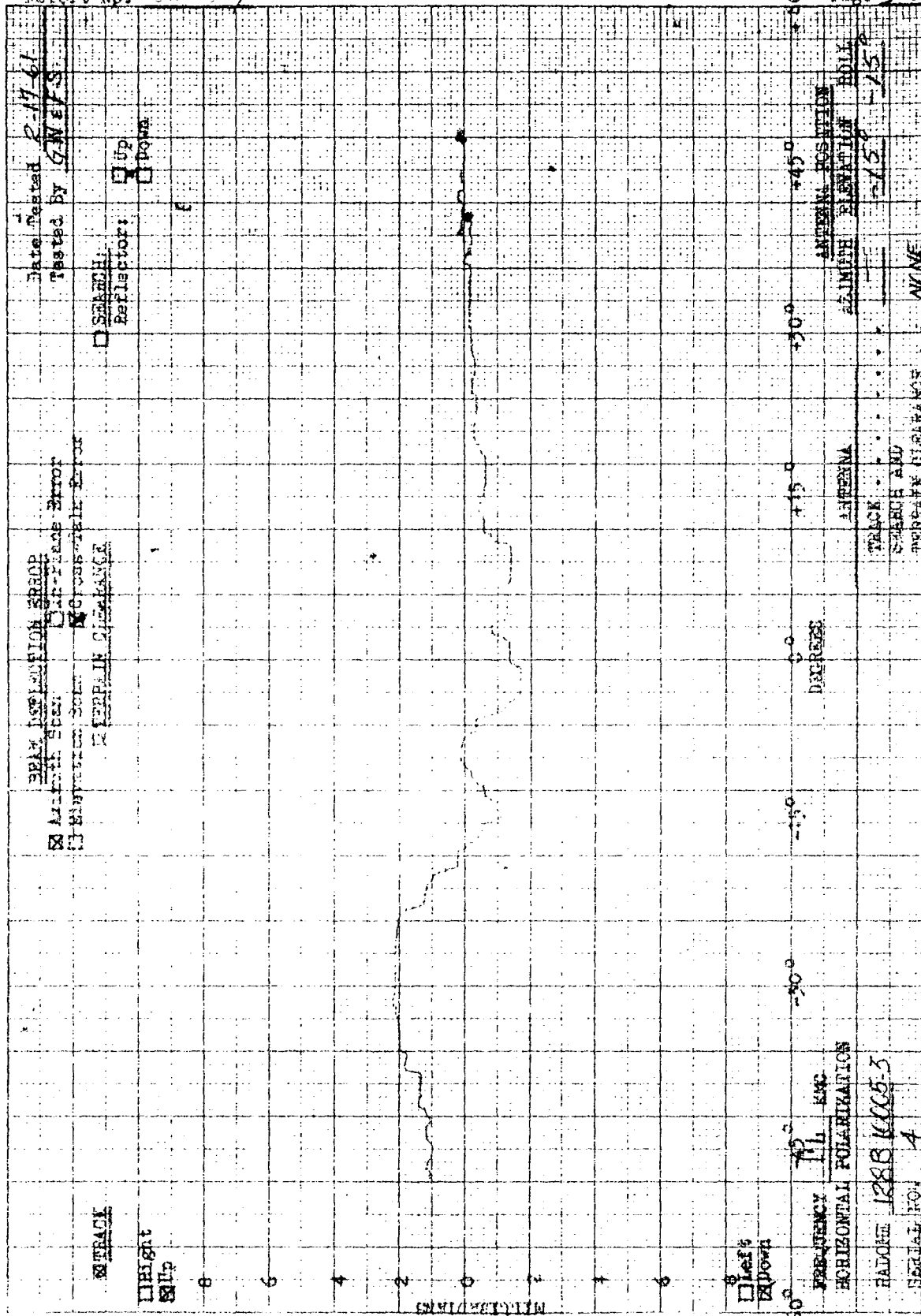
ALTIMETER ELEVATION

ROLL

10.0

15.0

20.0



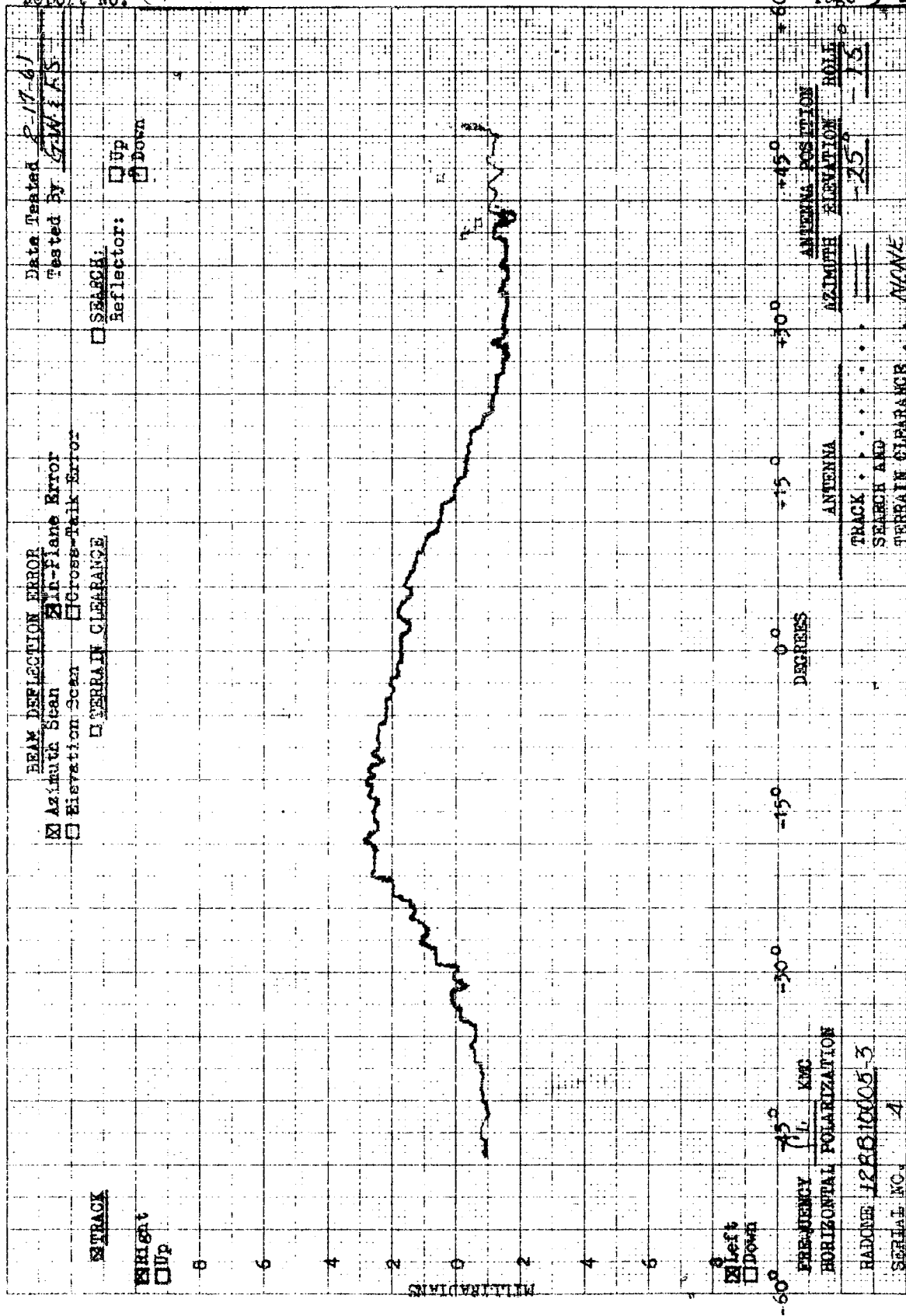
SPAN POSITION ERROR
☒ Antenna Error
☒ Misalignment Error
☒ Ground Plane Error
☒ Terrain Clearance

Date Tested 2-17-61
 Tested By GNW/RS

SEARCH
 Reflector: ☒ Up ☒ Down

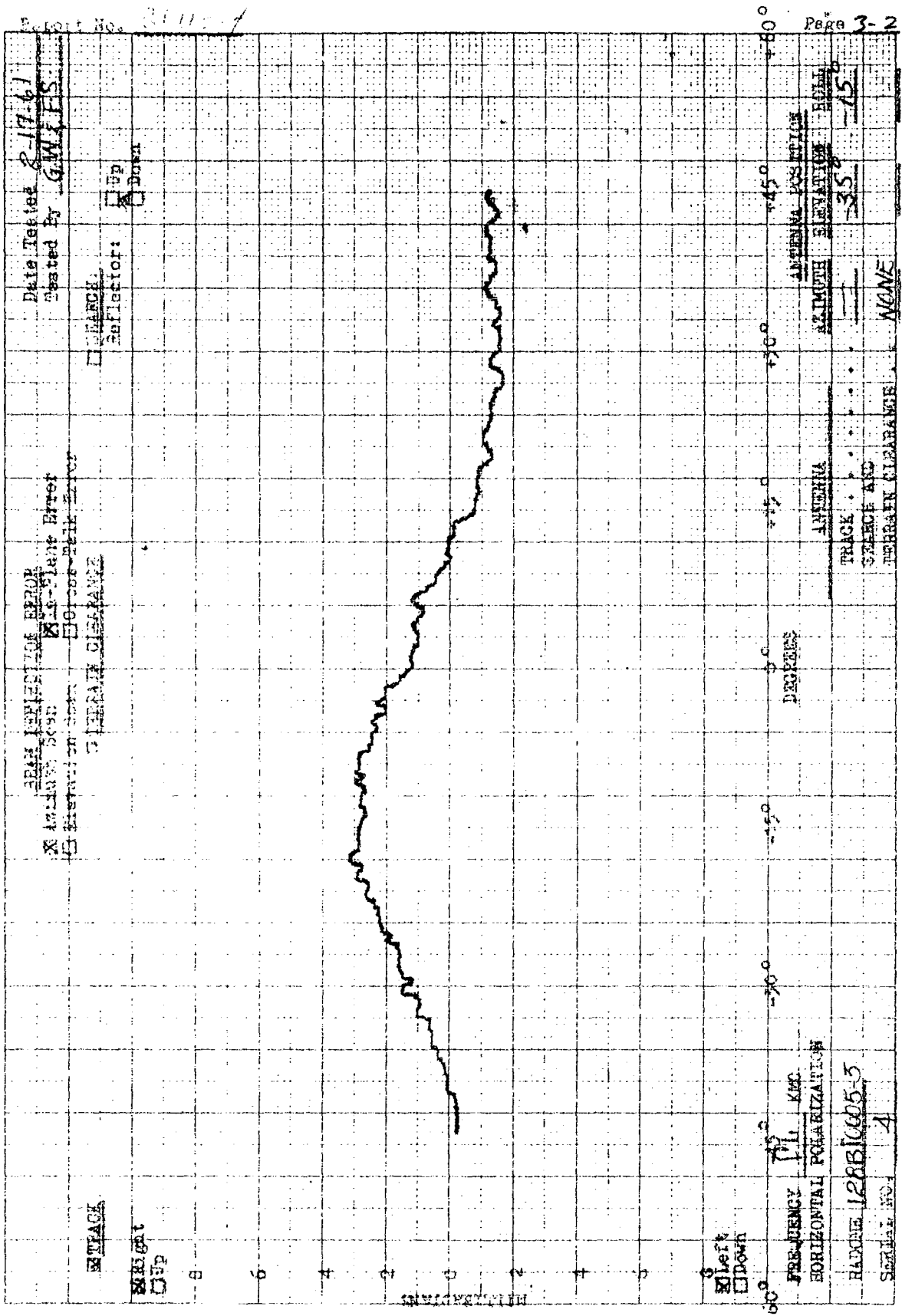
FREQUENCY 11.1 KMC
 HORIZONTAL POLARIZATION
 BALANCE 128B 6005-3
 SERIAL NO. 4

ANTENNA POSITION
 AZIMUTH POSITION 15
 ELEVATION 15
 TRACK AND SEARCH AND POSITION DISCREPANCY
 NONE



<input checked="" type="checkbox"/> <u>TRACK</u> <input type="checkbox"/> <u>Right</u> <input checked="" type="checkbox"/> <u>Up</u>		<u>BEAM DEFLECTION ERROR</u> <input checked="" type="checkbox"/> Azimuth Scan <input type="checkbox"/> In-Plane Error <input type="checkbox"/> Elevation Scan <input checked="" type="checkbox"/> Cross-Talk Error <input type="checkbox"/> <u>TERRAIN CLEARANCE</u>		Date Tested <u>8-17-61</u> Tested By <u>G.W.E.H.S.</u>	
<input type="checkbox"/> <u>SEARCH</u> Reflector: <input type="checkbox"/> Up <input type="checkbox"/> Down					
FREQUENCY <u>7.5</u> MC HORIZONTAL POLARIZATION <u>1</u>		DEGREES -50° -30° -15° 0° +15° +30° +45° +60°		ANTENNA POSITION AZIMUTH ELEVATION ROLL TRACK SEARCH AND TERRAIN CLEARANCE <u>NONE</u>	
RADOME <u>128B/0005.3</u> SERIAL NO. <u>1</u>					

10-10-61



Date Tested 8-17-61
 Tested By GWJFS

☒ Beam Reflection Error
☒ Azimuth Error
☒ Elevation Error
☒ Cor-Talk Error
☒ Terrain Clearance

TRACE

RIGHT
 DOWN

☒ SEARCH
 Reflector: ☒ Up
☒ Down

LEFT
 DOWN

FREQUENCY 75.2 MHz
 HORIZONTAL POLARIZATION

RADAR 128B1005-3

Serial NO. 4

DEGREES

ANTENNA POSITION

ANTENNA

TRACE

SPACE AND

TERRAIN CLEARANCE

AZIMUTH

ELEVATION

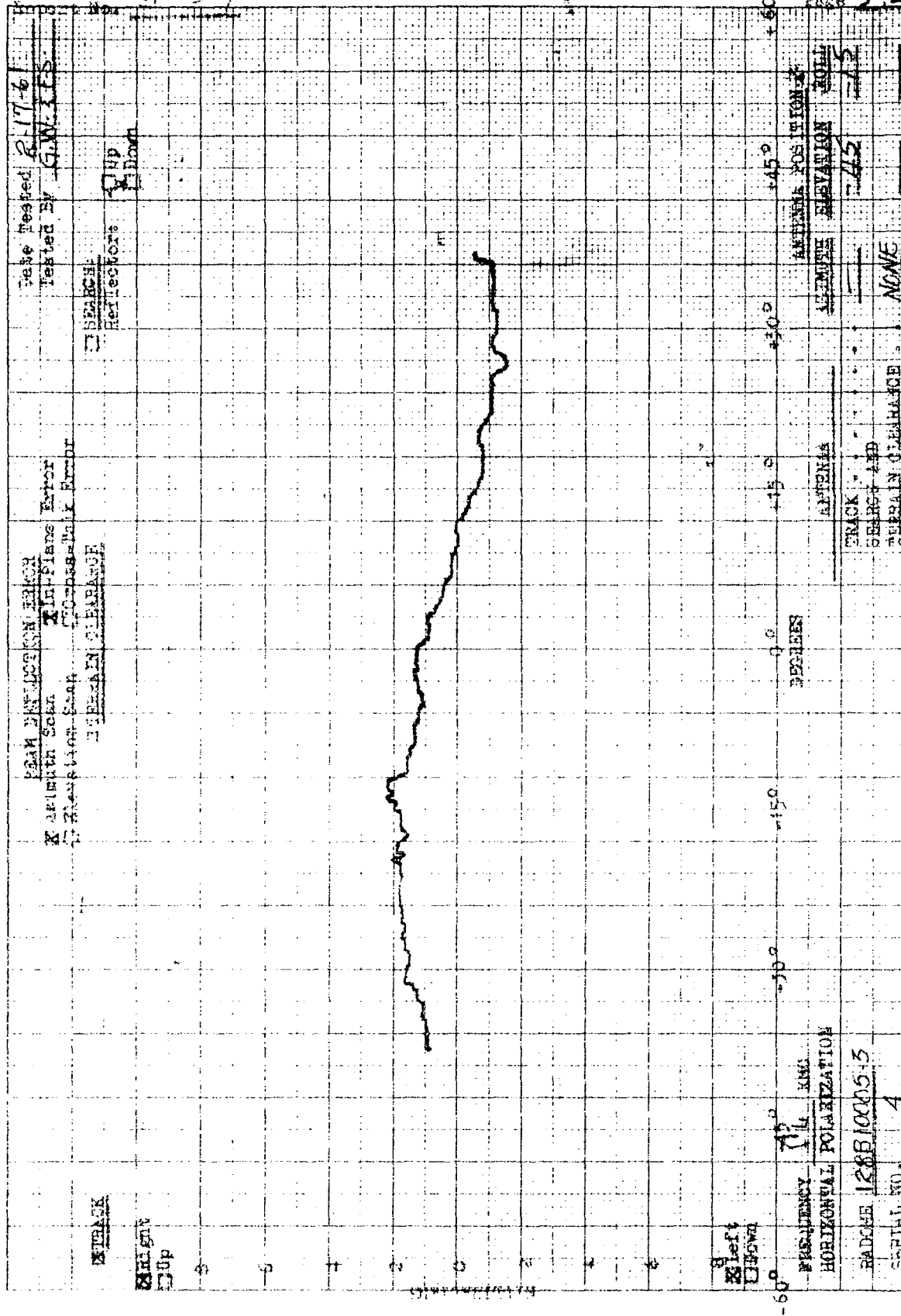
BUFILE

35

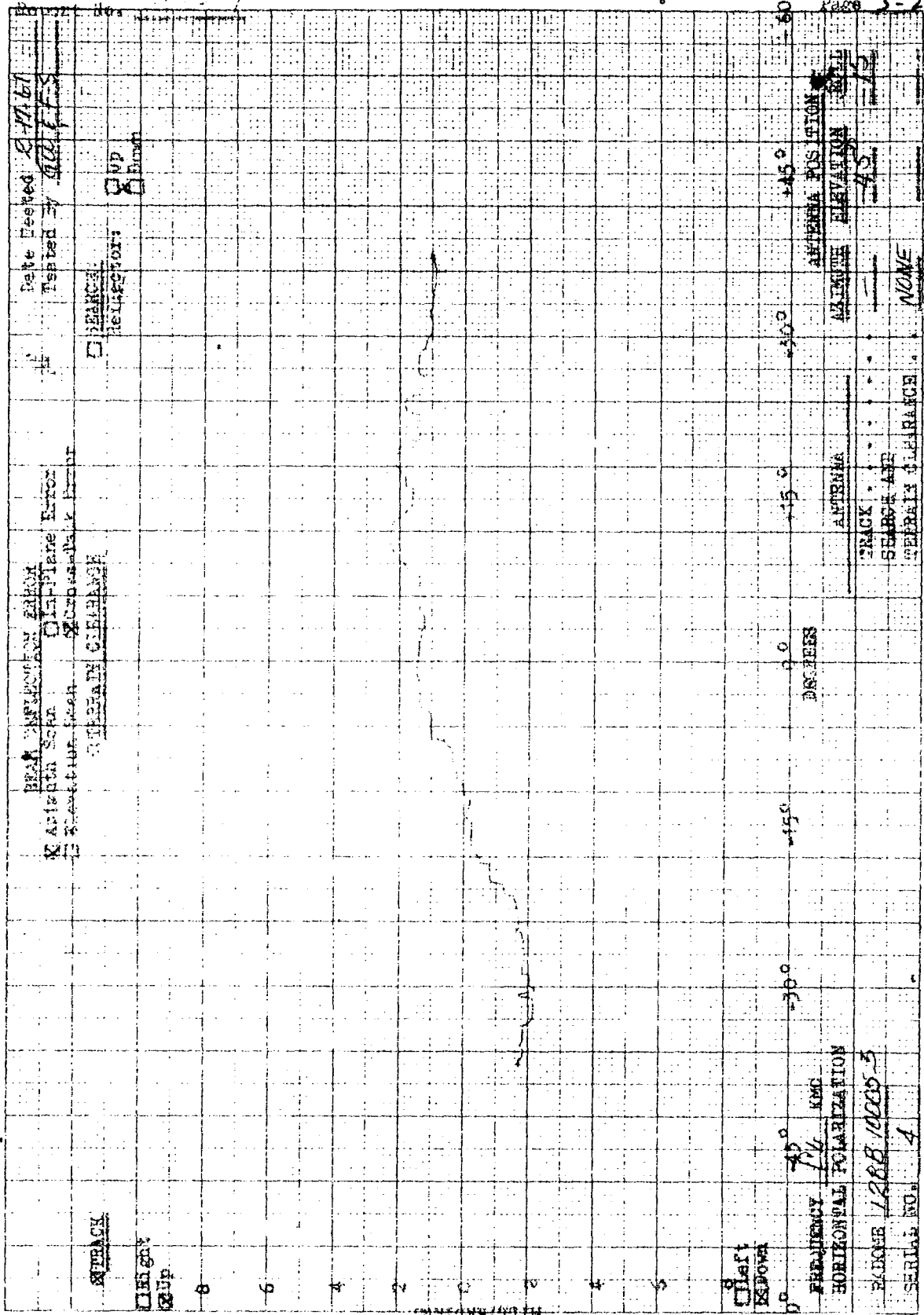
-45

None

Page 3-227



2.5. MAXIMUM ELEVATION 150.00



Date Tested 8-11-61
Tested by G. J. F. S.

MAXIMUM ELEVATION 150.00
ANTENNA TYPE ☒ DISK
ANTENNA ELEVATION 150.00
ANTENNA ELEVATION 150.00
ANTENNA ELEVATION 150.00

ANTENNA

HEIGHT EQUI

8

6

4

2

0

2

4

6

Chart
EQUATION

FREQUENCY 150 KMC
HORIZONTAL POLARIZATION

PLANE 1200 1000 5

SERIAL NO. 4

DEGREES

150

100

45

0

DEGREES

150

100

45

0

ANTENNA POSITION
ANTENNA ELEVATION 150.00
ANTENNA ELEVATION 150.00
ANTENNA ELEVATION 150.00

TRACK
SUBJECT AIR
SERIALS CLEARANCE

NONE

3-230

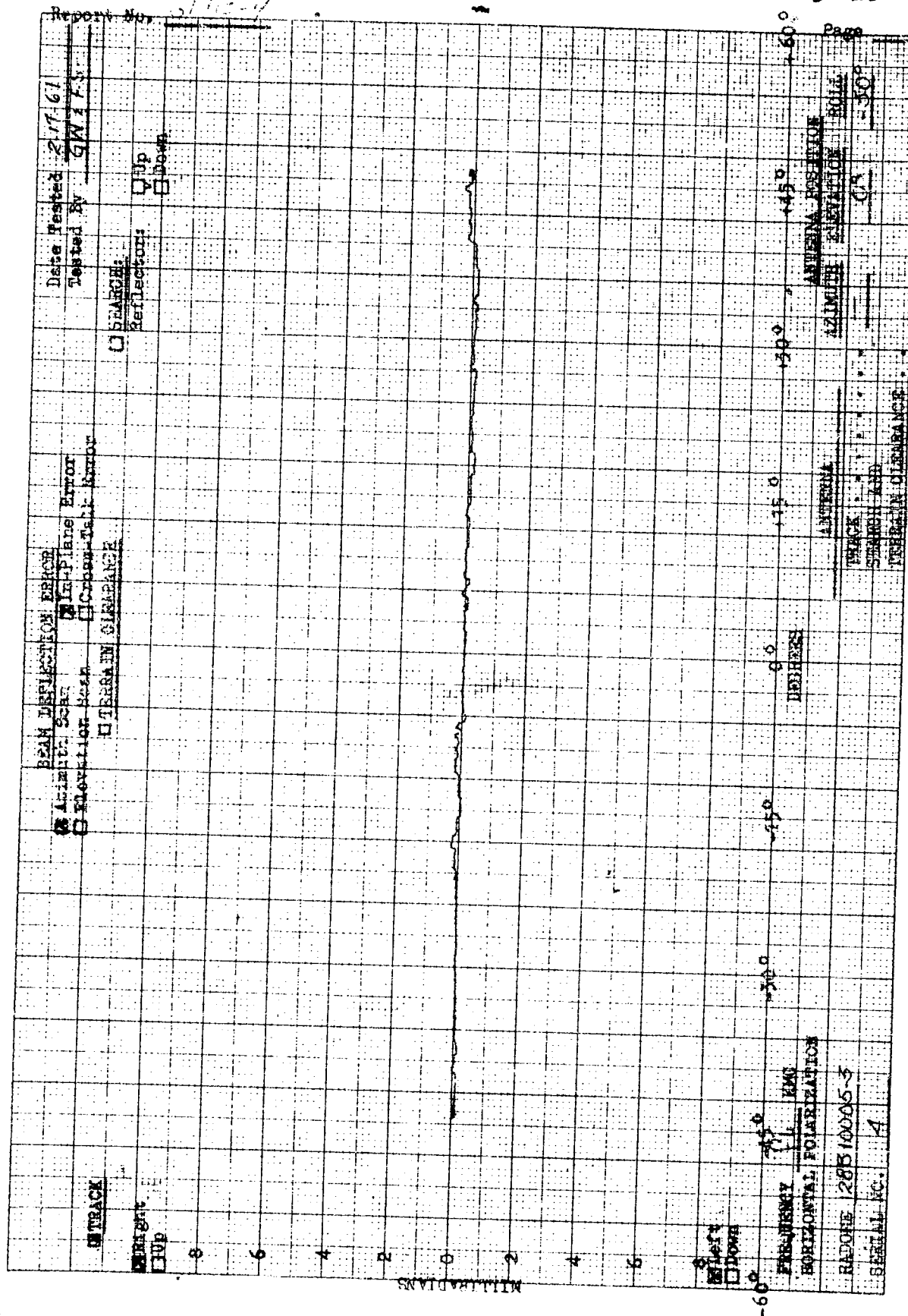
SECTION 59

TRACK BORESIGHT ERROR

$F_L @ -30^\circ$ ROLL

THE BRUNSWICK-BALKE-COLLENDER COMPANY

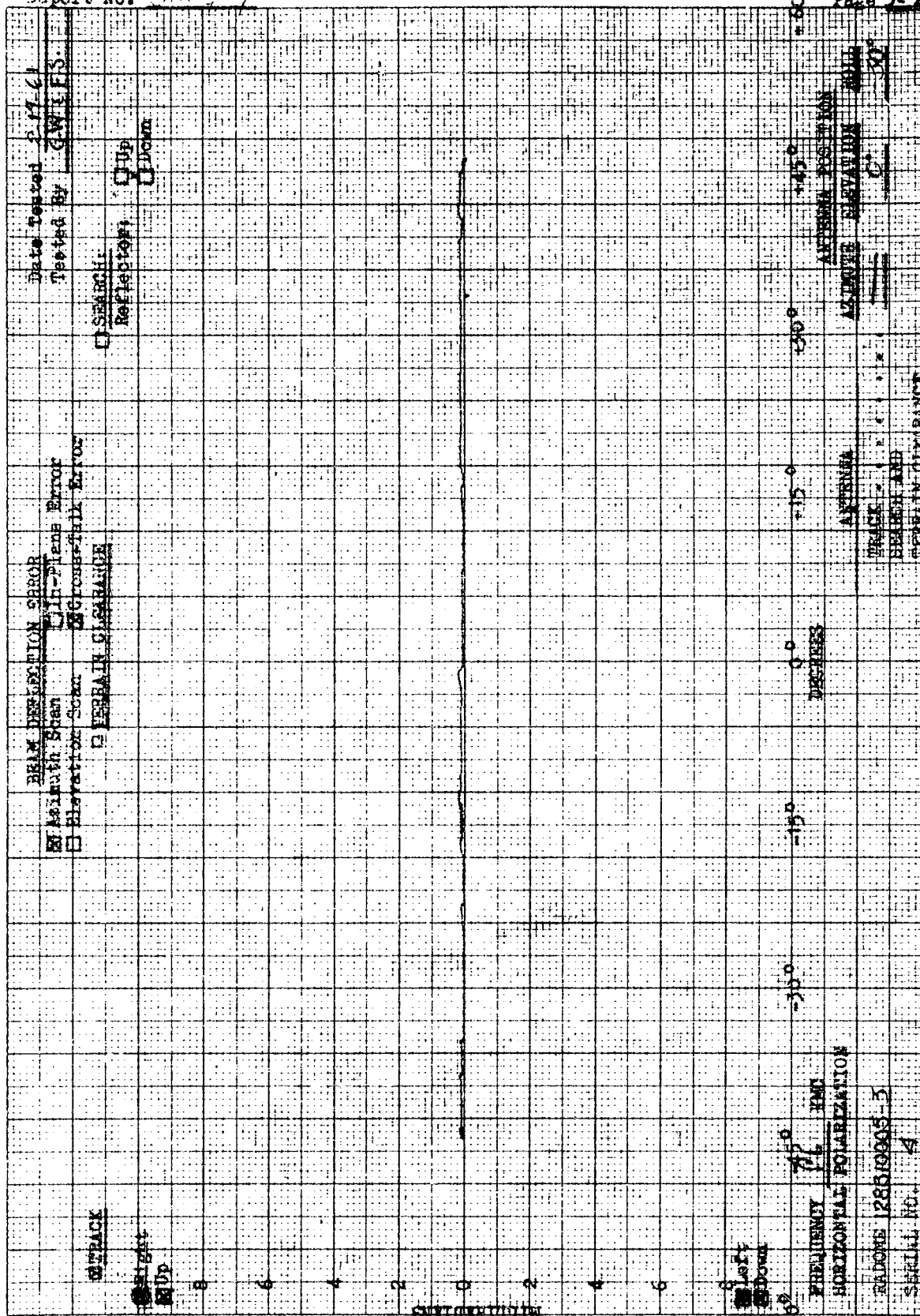
NO RADOME



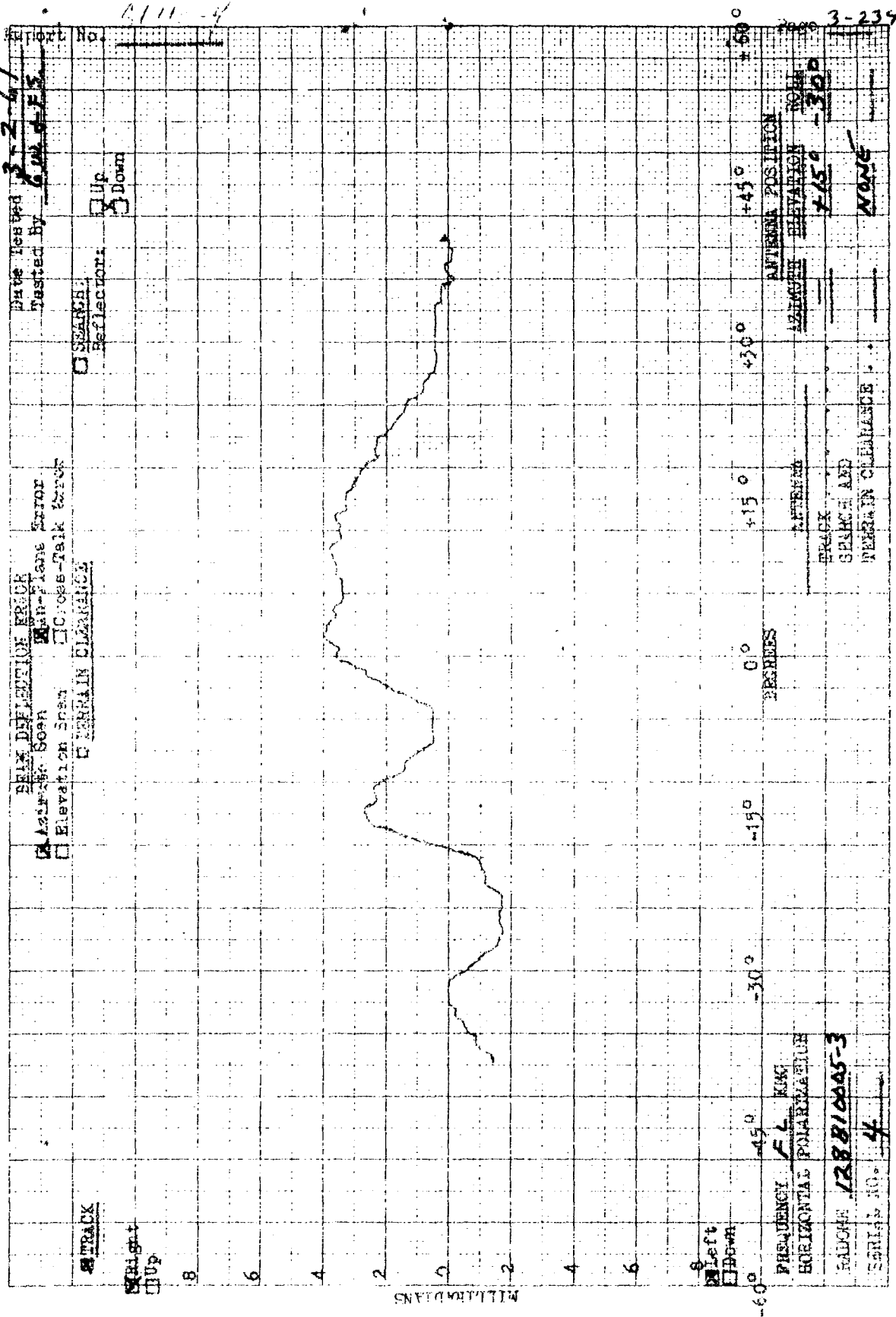
NOTE: 10X TO THE 1 INCH 359-116
KLOFFEL & COMPANY

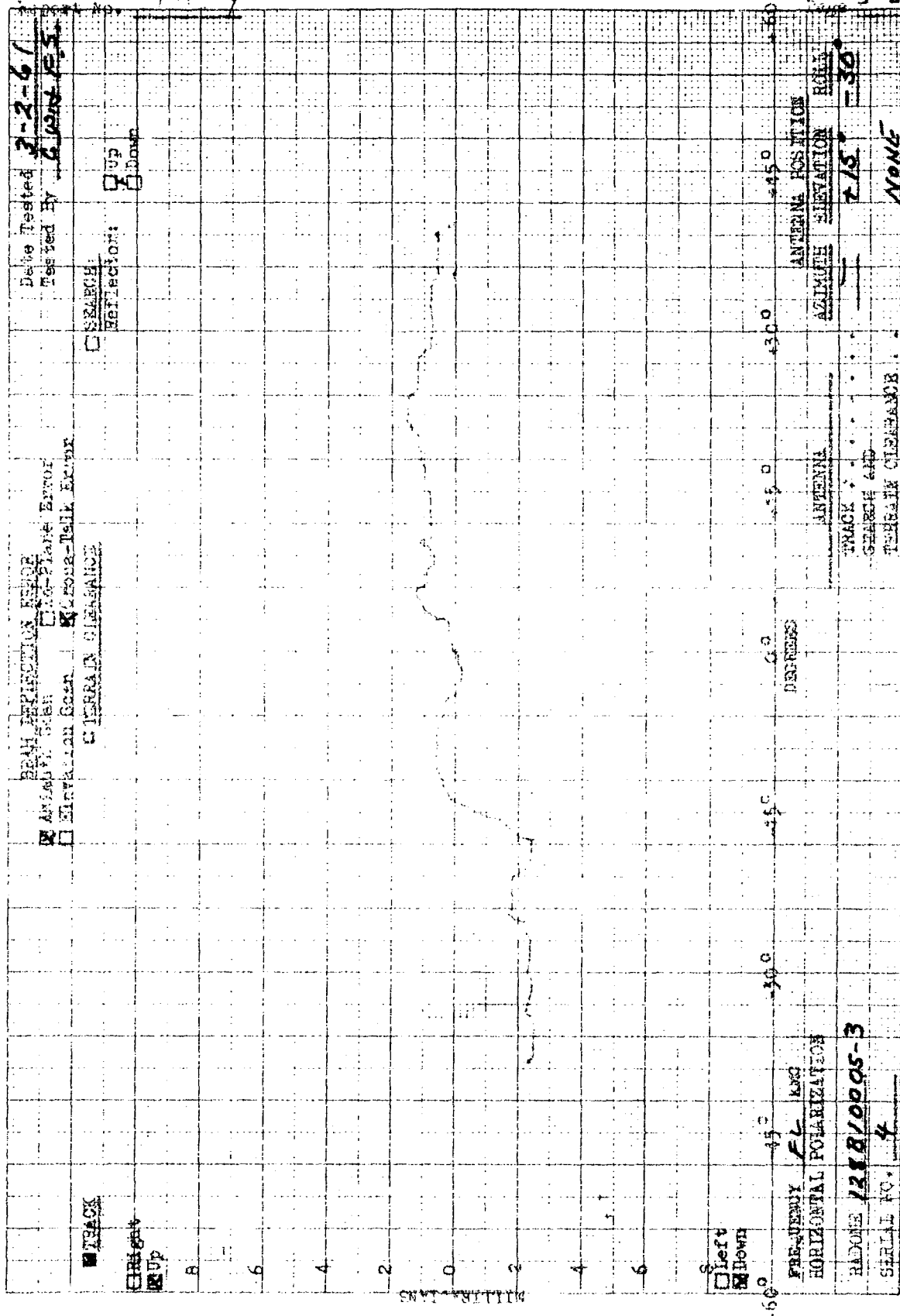
Report No. 2115-4

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NO RADONIE





Date Tested 3-2-61
 Tested By 60204-ES

SEARCH
 REFLECTION: ☐ Up ☐ Down

BEAM REFLECTION ERROR
☒ Antenna Error ☐ 10-Plane Error
☐ Elevation Error ☒ Azimuth-Plane Error
 CLEARANCE

TRACK
 CHIRP
☒ Up ☐ Down

☐ Left
☒ Down

FREQUENCY FL MHz
 HORIZONTAL POLARIZATION

RADOME 1218/0005-3
 SERIAL NO. 4

DEGREES

ANTENNA
 TRACK

SEARCH AND
 TERRAIN CLEARANCE

30°

45°

60°

ANTENNA POSITION
 AZIMUTH ELEVATION

215°
-30°

NONE

Date Tested **3-2-61**
 Tested By **CLB**
 Date **3-2-61**
 Radiator: ☒ Up ☐ Down
☒ SEARCH
☐ TRACK
 BEAM DEFINITION: ☒ RANGE ☒ ALTITUDE ☐ ELEVATION ☐ TRACK
 ANTENNA POSITION: ☐ ELEVATION ☐ ALTITUDE ☐ TRACK
 TRACK AND TERRAIN CLEARANCE: ☐ TRACK ☐ TERRAIN CLEARANCE
 FREQUENCY **5.4** MC
 HORIZONTAL POLARIZATION
 RANGE **12880005-3**
 SERIAL NO. **4**

3-237

4

Date Tested 3-2-61
 Tested By W. H. H. H.

SEARCH: ☒ Up ☐ Down

BEAM DEFLECTION SWITCH
☒ ALTIMETER SOFT
☐ ALTITUDE SOFT
☐ TERRAIN CLEARANCE

TRACK
☐ Right
☒ Up
 8
 5
 4
 2
 0
 2
 4
 6

DEGREES
 -60° -45° -30° -15° 0° +15° +30° +45° +60°

FREQUENCY 4.0 KMC
 HORIZONTAL POLARIZATION

RAUCHE 128810005-3
 SERIAL NO. 4

ANTENNA POSITION
 ALTITUDE ELEVATION 7100
 TRACK SEARCH AND
 TERRAIN CLEARANCE NONE

<p>BEAM DEFLECTION ERROR</p> <p><input checked="" type="checkbox"/> Azimuth Scan <input checked="" type="checkbox"/> In-Plane Error</p> <p><input type="checkbox"/> Elevation Scan <input type="checkbox"/> Cross-Talk Error</p> <p><input checked="" type="checkbox"/> TRACK <input type="checkbox"/> TERRAIN CLEARANCE</p>		<p>Date Tested <u>3-2-61</u></p> <p>Tested By <u>C. W. T. A. S.</u></p>	
<p>SEARCH:</p> <p>Reflector: <input type="checkbox"/> Up <input checked="" type="checkbox"/> Down</p>			
<p>RIGHT</p> <p><input checked="" type="checkbox"/> Up</p> <p><input type="checkbox"/> Down</p>			
<p>8</p> <p>6</p> <p>4</p> <p>2</p> <p>0</p> <p>2</p> <p>4</p> <p>6</p>			
<p>Left</p> <p><input checked="" type="checkbox"/> Up</p> <p><input type="checkbox"/> Down</p>			
<p>8</p> <p>6</p> <p>4</p> <p>2</p> <p>0</p> <p>2</p> <p>4</p> <p>6</p>			
<p>FREQUENCY <u>61</u> KMC</p> <p>HORIZONTAL POLARIZATION</p>		<p>DEGREES</p> <p>0°</p> <p>15°</p> <p>30°</p> <p>45°</p> <p>60°</p>	
<p>RADONE <u>125 B/0005-3</u></p>		<p>ANTENNA POSITION</p> <p>ANTENNA ELEVATION <u>15°</u></p> <p>ANTENNA AZIMUTH <u>150°</u></p>	
<p>SERIAL NO. <u>4</u></p>		<p>TRACK SEARCH AND TERRAIN CLEARANCE</p>	

MILLIMETERS

Report No. 3-239

Date Tested 3-2-41
Tested By W. H. H. S.

BEAM DEFLECTION ERROR
☒ Azimuth Scan ☐ In-Plane Error
☐ Elevation Scan ☒ Cross-Talk Error
☐ TERRAIN CLEARANCE

SEARCH:
Reflector: ☐ Up ☒ Down

WTRACK

☐ Right
☒ Up

8

6

4

2

0

2

4

6

8

☐ Left
☒ Down

-50°

-45°

-30°

-15°

0°

+15°

+30°

+45°

+60°

FREQUENCY 64 KMC
HORIZONTAL POLARIZATION

RADOME 128

SEAL NO. 4

DEPRESS

ANTENNA

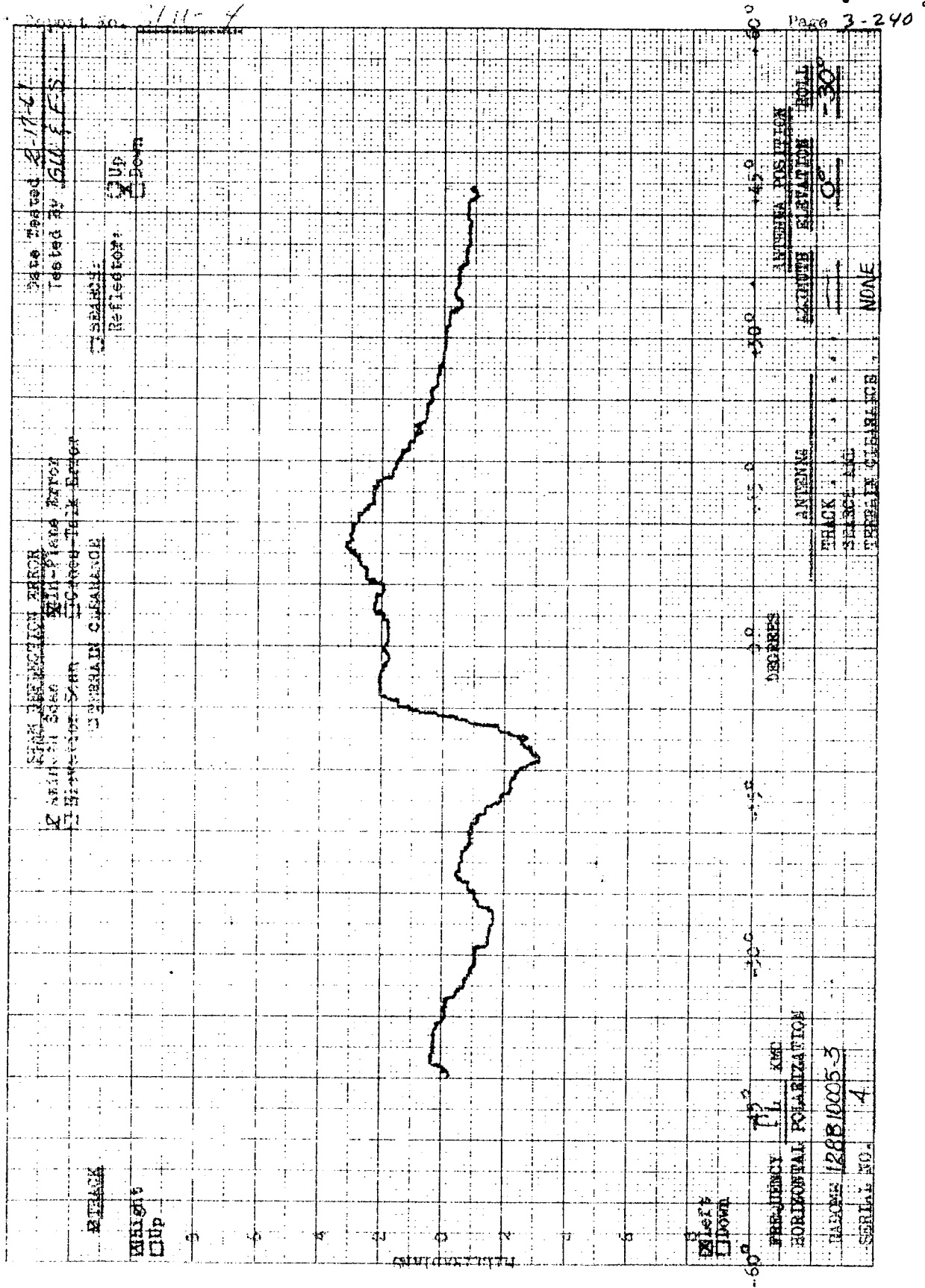
TRACK
SEARCH AND
TERRAIN CLEARANCE

ANTENNA POSITION
AZIMUTH ELEVATION

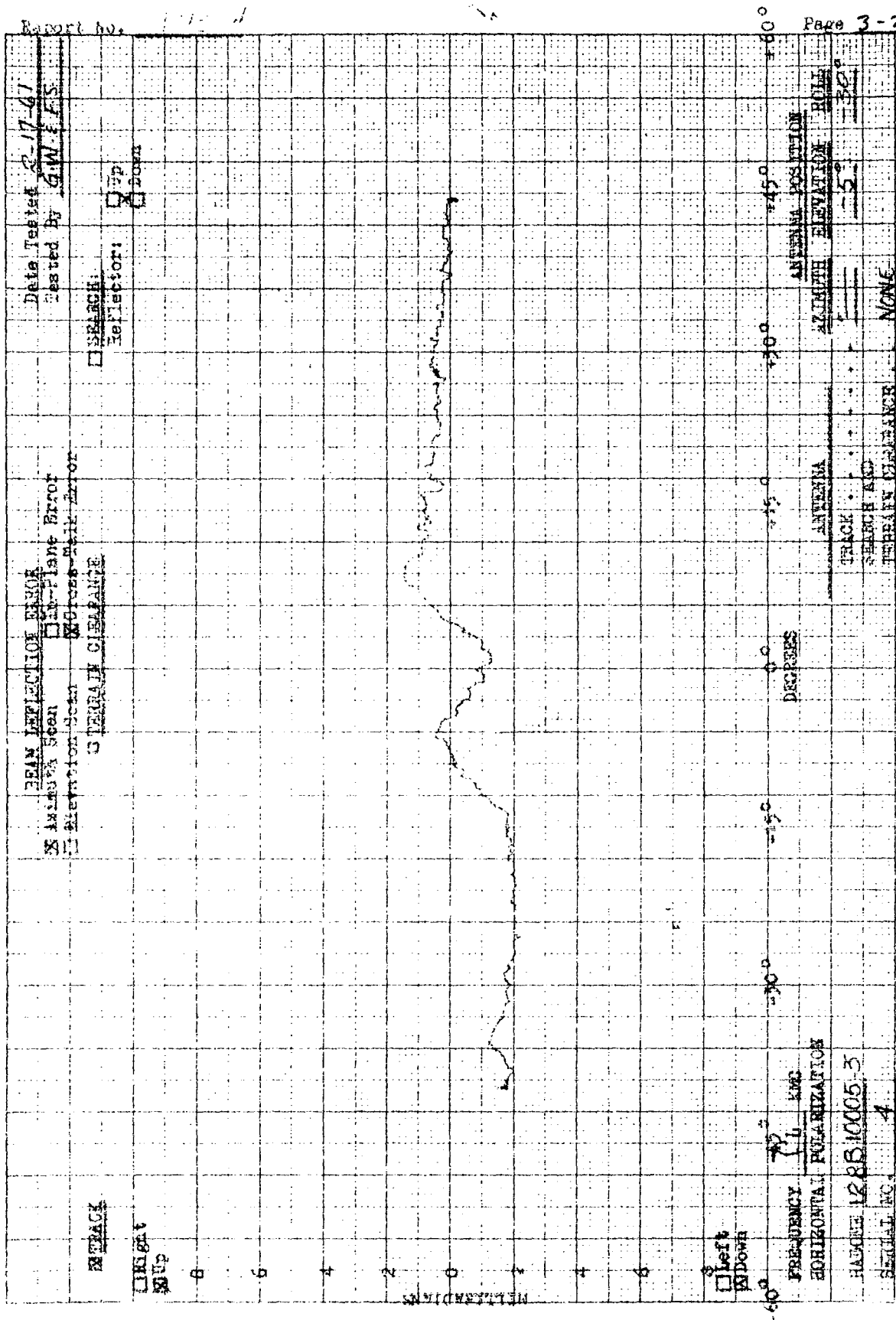
30 +30

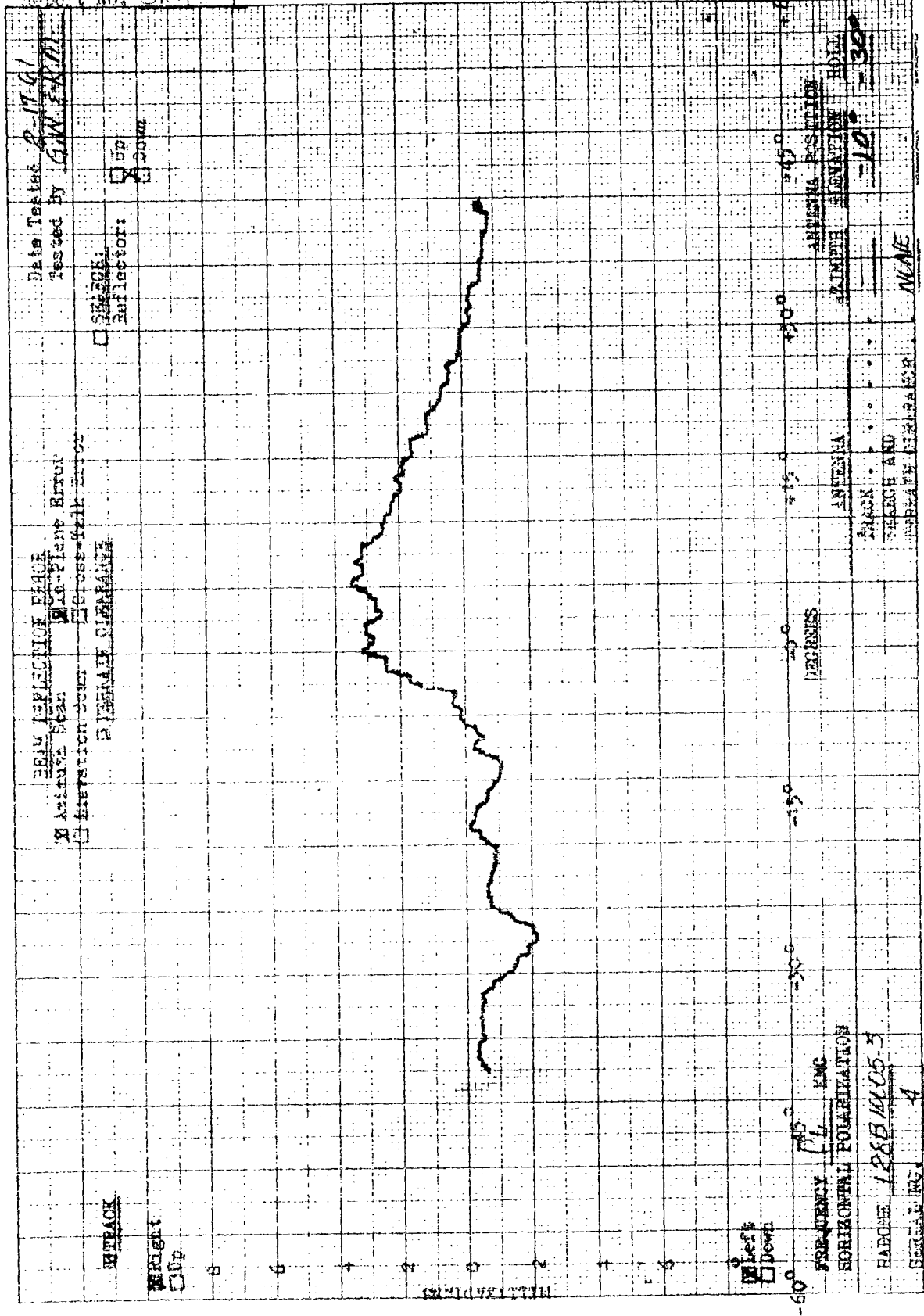
NONE

3-239



DATE TESTED <u>2-17-61</u> TESTED BY <u>GMH/FJS</u>		SEARCH: <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down Reflector: <input checked="" type="checkbox"/>	
BEAM REFLECTION ERROR <input checked="" type="checkbox"/> Azimuth Error <input checked="" type="checkbox"/> Elevation Error <input checked="" type="checkbox"/> Horizon Scan <input checked="" type="checkbox"/> Terrain Clearance		ANTENNA POSITION ANTENNA ELEVATION <u>30°</u> AZIMUTH <u>128°</u>	
TRACK Elevation <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down		TRACK AND TERRAIN CLEARANCE NAME <u>128810005-3</u> SERIAL NO. <u>4</u>	





Date Taken 2-17-61
 Tested by GW. F. R. M.

Beam Reflection Error
☒ Azimuth Error
☐ Elevation Error
☐ Cross-Axis Error
☐ Beam Deflection Error

Reflector: ☐ 5p
☒ 30m

UTRACK

Vertical
☒ Up

Left
☐ Down

FREQUENCY 1.6 KMC
 HORIZONTAL POLARIZATION

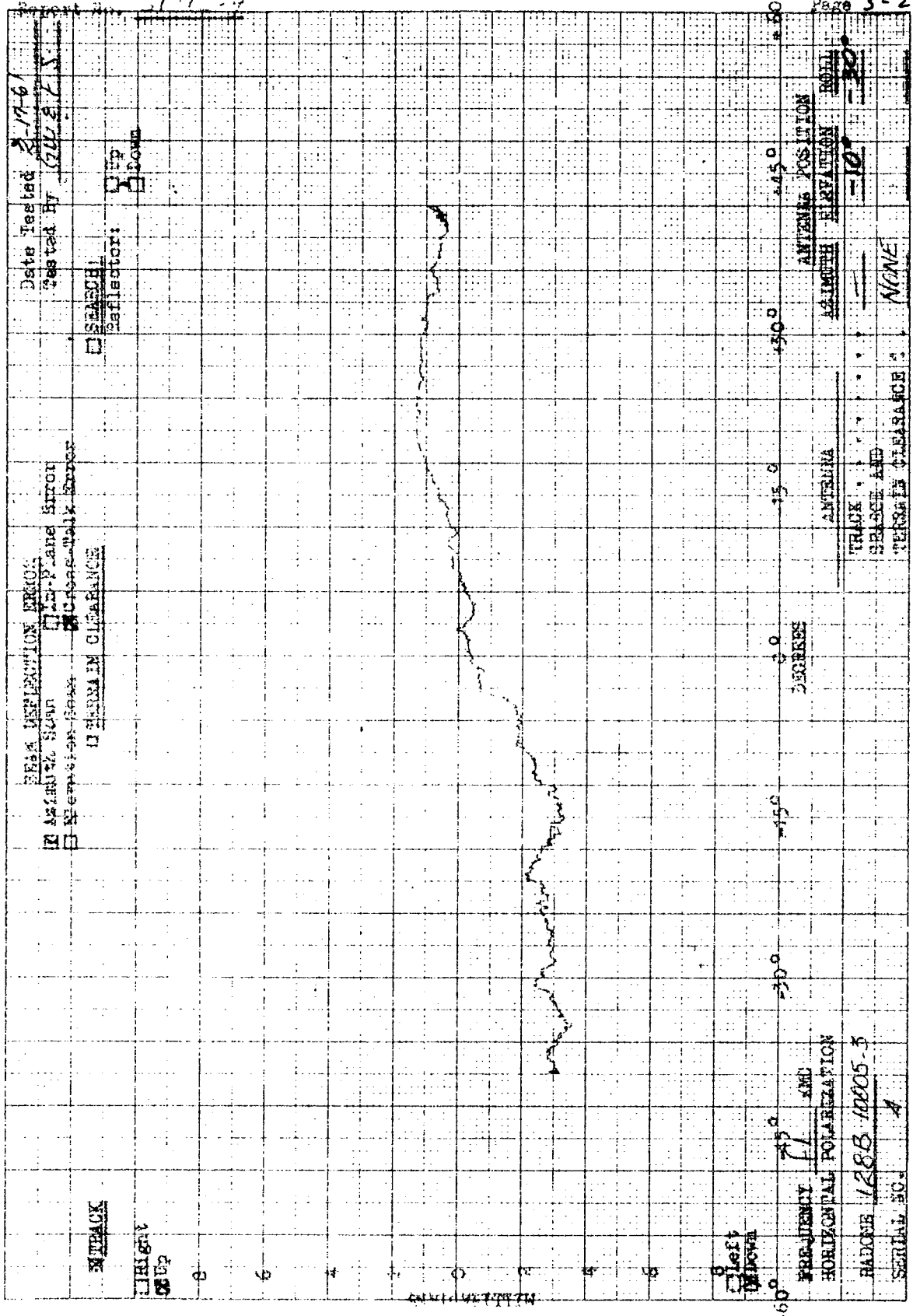
RADOME 128B/4405-3
 SERIAL NO. 4

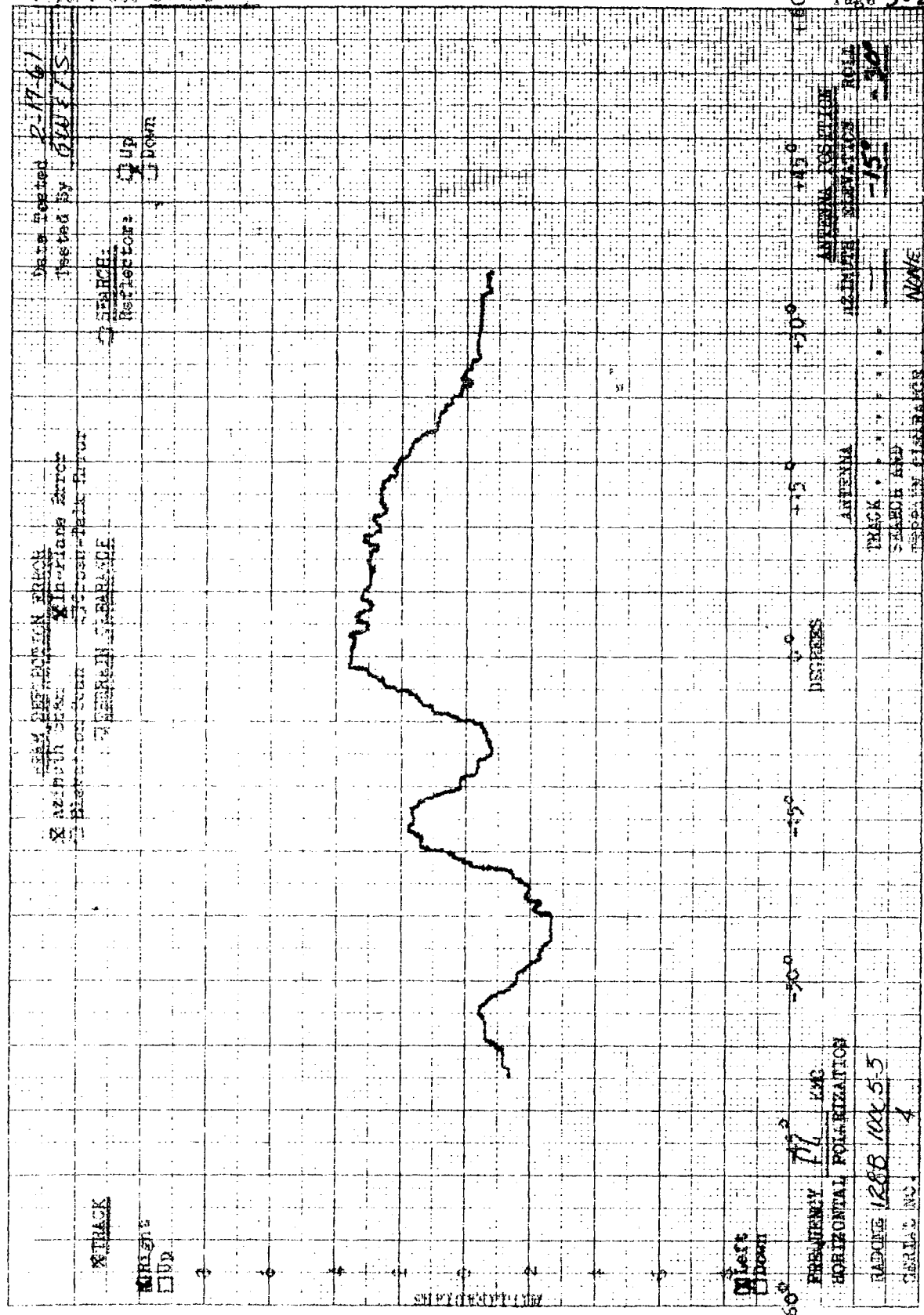
DEGREES

ANTENNA
 TRACK
 SEARCH AND
 DEPTH AIRBORNE

ANTENNA POSITION
 PRIME ELEVATION 10
 HOE -30

NAME





Date tested 2-17-61
 Tested by GWETS

SEALED SECTION FROM
X INDIANA STATE
INSTRUMENT
INSTRUMENT
INSTRUMENT

Reflector: UP
DOWN

TRACK

RIGHT
☐ UP

LEFT
☐ DOWN

FREQUENCY 17 KHZ
 HORIZONTAL POLARIZATION

RANGE 1288 100.5-5
 SERIAL NO. 4

DEGREES

ANTENNA

TRACK AND
 SEARCH AND
 TRACKING DISTANCE

ANTENNA POSITION
 AZIMUTH ELEVATION

150
150

NOVE

6-2-2

BEAM DEFLECTION ERROR

SECRET
 2025 RELEASE UNDER E.O. 14176

~~SECRET~~ - ~~TOP SECRET~~ - ~~SECRET~~

CLYDE C. HARRIS

Date Tested 3-2-61

Tested by G.W.Y.F.S.

SEARCH:

Reflected to:	<input checked="" type="checkbox"/> Up
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11-11-11

11-11-11

NOVEL

2018

24

8

Left

FRIDAY

HOSPITAL POLARIZATION

128 B1005 - 3

4

[illegible]

張江田氏

2242

35450-100

WINTER 1964

STUDENT DIS FOR

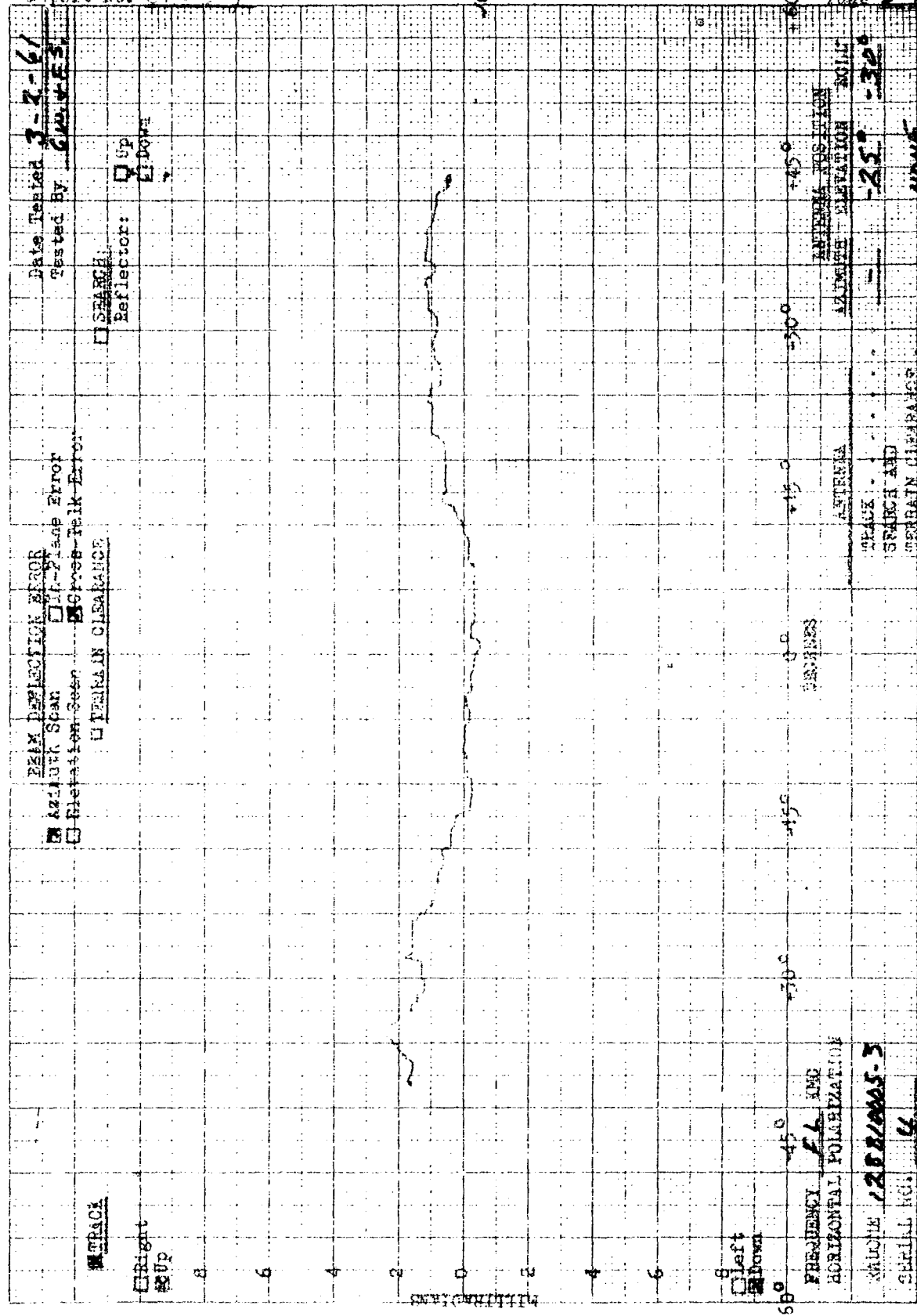
RODFARE EILHNTZ

25

[illegible]

10

3-248



Date Tested 3-2-61
 Tested By CAW. JES

Beam Deflection Error
☒ Azimuth Span
☐ Elevation Span
☒ Groove-Talk Error
☐ Terrain Clearance

Reflector: ☐ Up
☒ Down

TRACK

Left
 Right

Left
 Right

FREQUENCY FL MHz
 HORIZONTAL POLARIZATION

DATE 12/22/60

SERIAL NO. 6

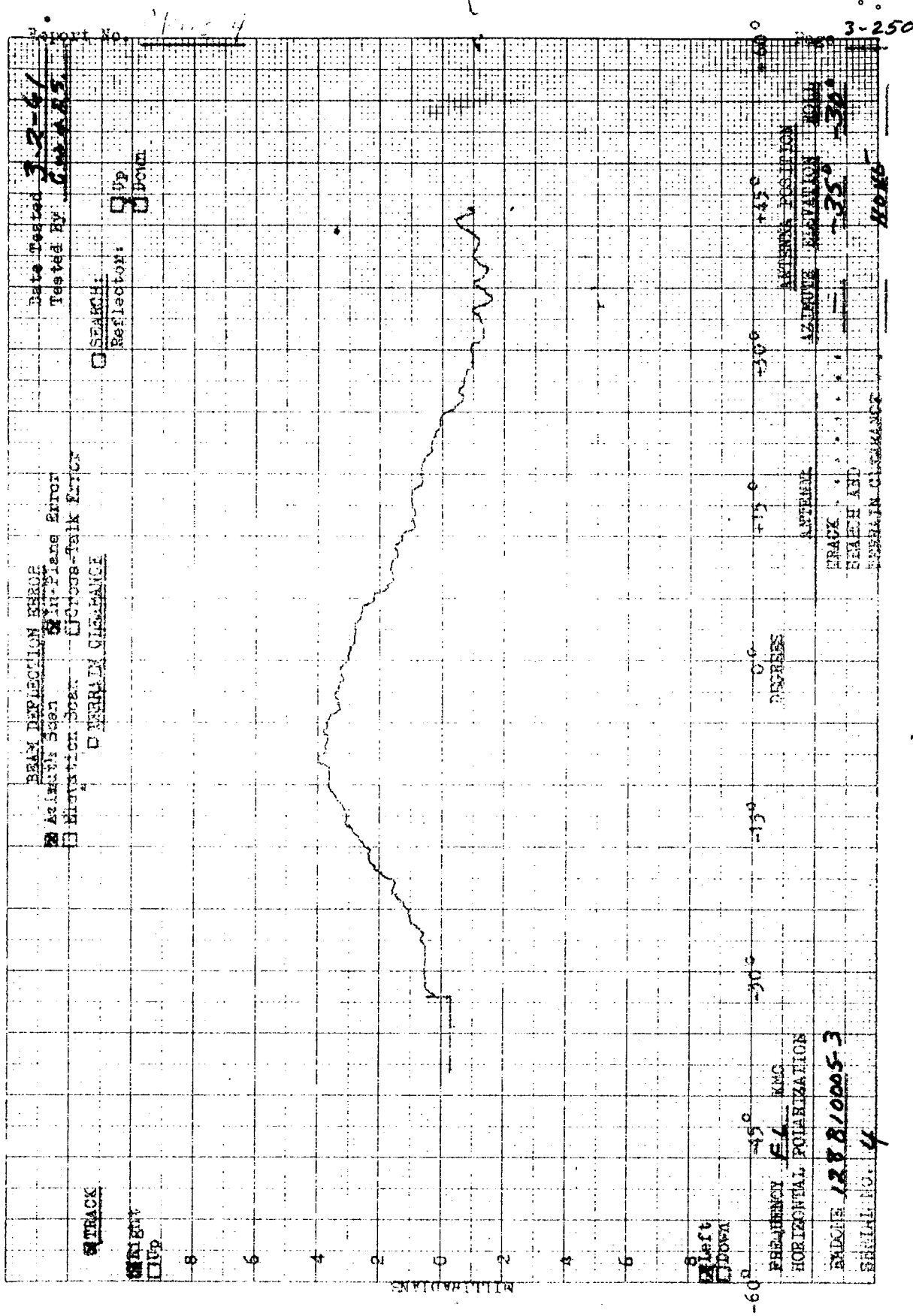
ANTENNA
 TRACK

SEARCH AND
 TERRAIN CLEARANCE

ANTENNA POSITION
 AZIMUTH ELEVATION

25 -30

None



BEAM DEFLECTION ERROR
☒ Azimuth Scan ☒ In-Plane Error
☒ Distortion Scan ☐ Out-of-Plane Error
☐ Beam Deflection Error

Date Tested 3-2-61
Tested By G. W. 225

SEARCH:
Reflector: ☐ Up ☐ Down

TRACK

☒ Right
☐ Up

☒ Left
☐ Down

FREQUENCY 5.4 KMC
HORIZONTAL POLARIZATION

RADAR 128810005-3

SERIAL NO. 4

DEGREES

ANTENNA

ANTENNA POSITION

AZIMUTH ELEVATION

TRACK
SEARCH AND
SERIAL NO.

8000

BEAM DEFLECTION ERROR <input checked="" type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error <input type="checkbox"/> Cross-Track Error <input type="checkbox"/> TERRAIN CLEARANCE		Date Tested 3-2-61 Tested by CLW:AS	
RETRACT <input type="checkbox"/> Right <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down		SEARCH Reflector: <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down	
FREQUENCY 4.4 MC HORIZONTAL POLARIZATION		ANTENNA POSITION ANTENNA ELEVATION 30° TRACK 30° SEARCH AND TERRAIN CLEARANCE	
RANGE NO. 4		RANGE 4	

Milliradians

Left
Down

-60°

-45°

-30°

-15°

0°

+15°

+30°

+45°

+60°

Report No. 3-2-61

Date Tested 3-2-61
Tested By CHAS. R. S.

BEAM DEFLECTION ERROR
☒ Azimuth Scan ☒ In-Plane Error
☐ Elevation Scan ☐ Cross-Talk Error
☐ TERRAIN CLEARANCE

☐ SEARCH:

Reflector: ☒ Up ☒ Down

TRACK

☒ Right
☐ Up

8

6

4

2

0

2

4

6

☒ Left
☐ Down

-60°

FREQUENCY 2.6 MHz
HORIZONTAL POLARIZATION

RANGE 128810005.3

SERIAL NO. 4

DEGREES

-45°

-30°

-15°

0°

+15°

+30°

+45°

+60°

ANTENNA POSITION

AZIMUTH ELEVATION

SEARCH AND

TERRAIN CLEARANCE

NAME

BEAM DEFLECTION ERROR		Date tested	
<input checked="" type="checkbox"/> Azimuth Scale <input type="checkbox"/> Elevation Scale <input checked="" type="checkbox"/> Cross-Talk Error <input type="checkbox"/> TERRAIN CLEARANCE		Tested by <u>601-3-3-61</u> Reflector: <input type="checkbox"/> SEARCH <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down	
TRACK <input type="checkbox"/> Left <input checked="" type="checkbox"/> Right <input type="checkbox"/> Up <input checked="" type="checkbox"/> Down		REFLECTOR <input type="checkbox"/> SEARCH <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down	
FREQUENCY <u>5.1</u> XMC HORIZONTAL POLARIZATION		ANTENNA POSITION ELEVATION <u>45°</u> AZIMUTH <u>150°</u>	
RANGE <u>128810005-3</u>		TRACK <u>150°</u> SEARCH AND TERRAIN CLEARANCE	
SERIAL NO. <u>4</u>		3.253	

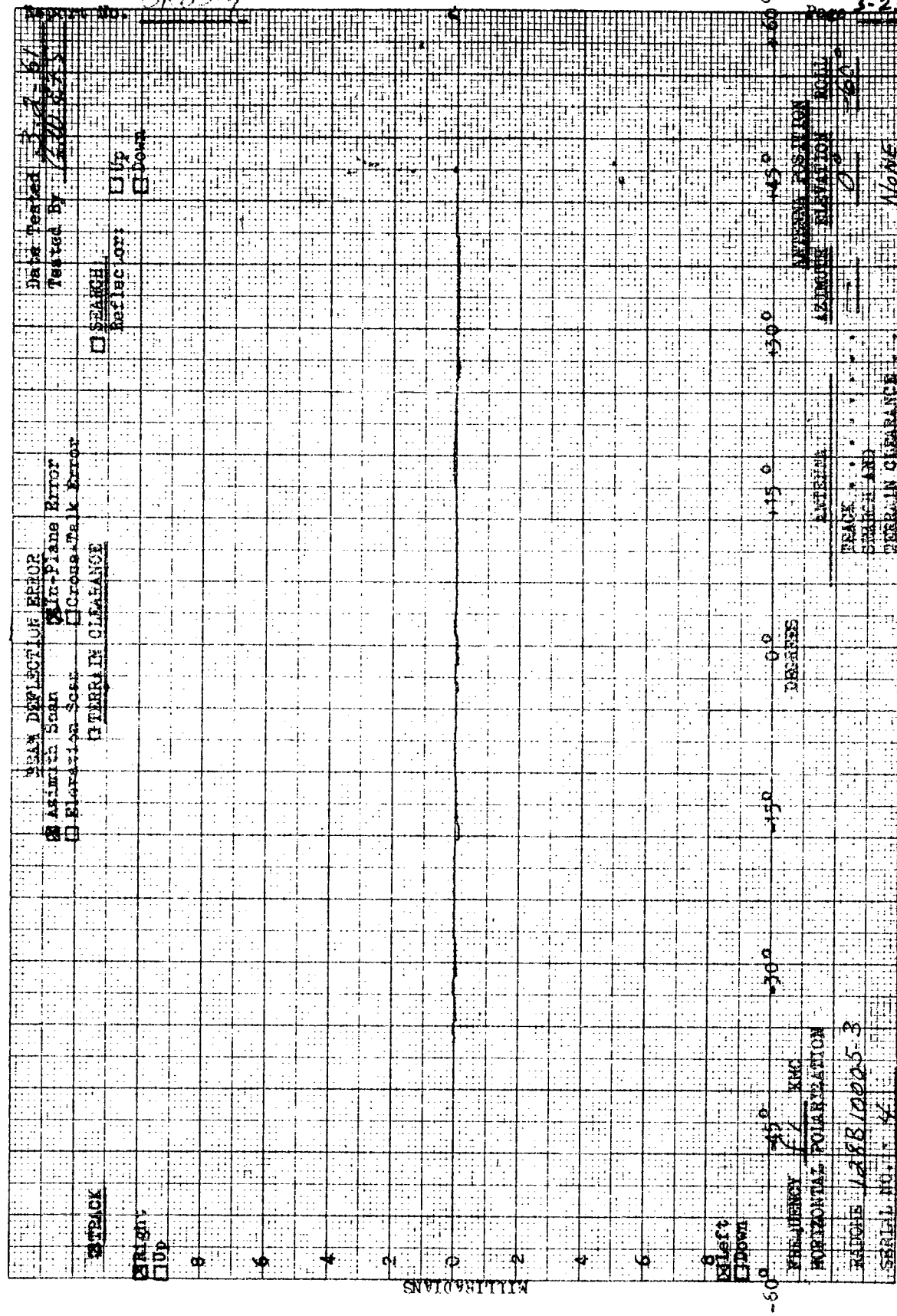
SECTION 40

TRACK BORESIGHT ERROR

$F_L @ -60^\circ$ ROLL

BOX 10 TO THE ENGINE ROOM

RECEIVED TESTING



10X TO 100X INCHES 20-1110

Report No. GRU-4

Date Tested 1-18-61
 Tested By G. H. G. H.

☒ SEARCH
 Reflector: ☐ Up ☐ Down

BRAM REFLECTION ERROR
☒ Azimuth Scan ☐ In-Plane Error
☒ Elevation Scan ☒ Cross-Talk Error
☐ TERRAIN CLEARANCE

☒ TRACK
☐ Right ☐ Left
☐ Up ☐ Down

60° 45° 30° 15° 0° 15° 30° 45° 60°

FEET

FREQUENCY 14 KHz
 HORIZONTAL POLARIZATION

RANGE 18.83 1000 5-3

SPIN NO. 51

ANTENNA POSITION
 ANTENNA ELEVATION 0
 ANTENNA ELEVATION 0

TRACK SEARCH
 TERRAIN CLEARANCE

100% LEVEL

Date Tested 3-2-61
Tested by G. J. F.

BEAM DEFLECTION ERROR	
<input type="checkbox"/> Azimuth Scan	Main-Plane Error
<input type="checkbox"/> Elevation Scan	Microsh-Talk Error

☐ SEARCH: ☐ Up ☐ Down

QUINCY, ILL.

4-20-68

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1994

9-6

4

THE UNIVERSITY OF CHICAGO

WILLIAM L. BROWN

12月23日

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INVESTIGATION REPORT

ROBAMATE

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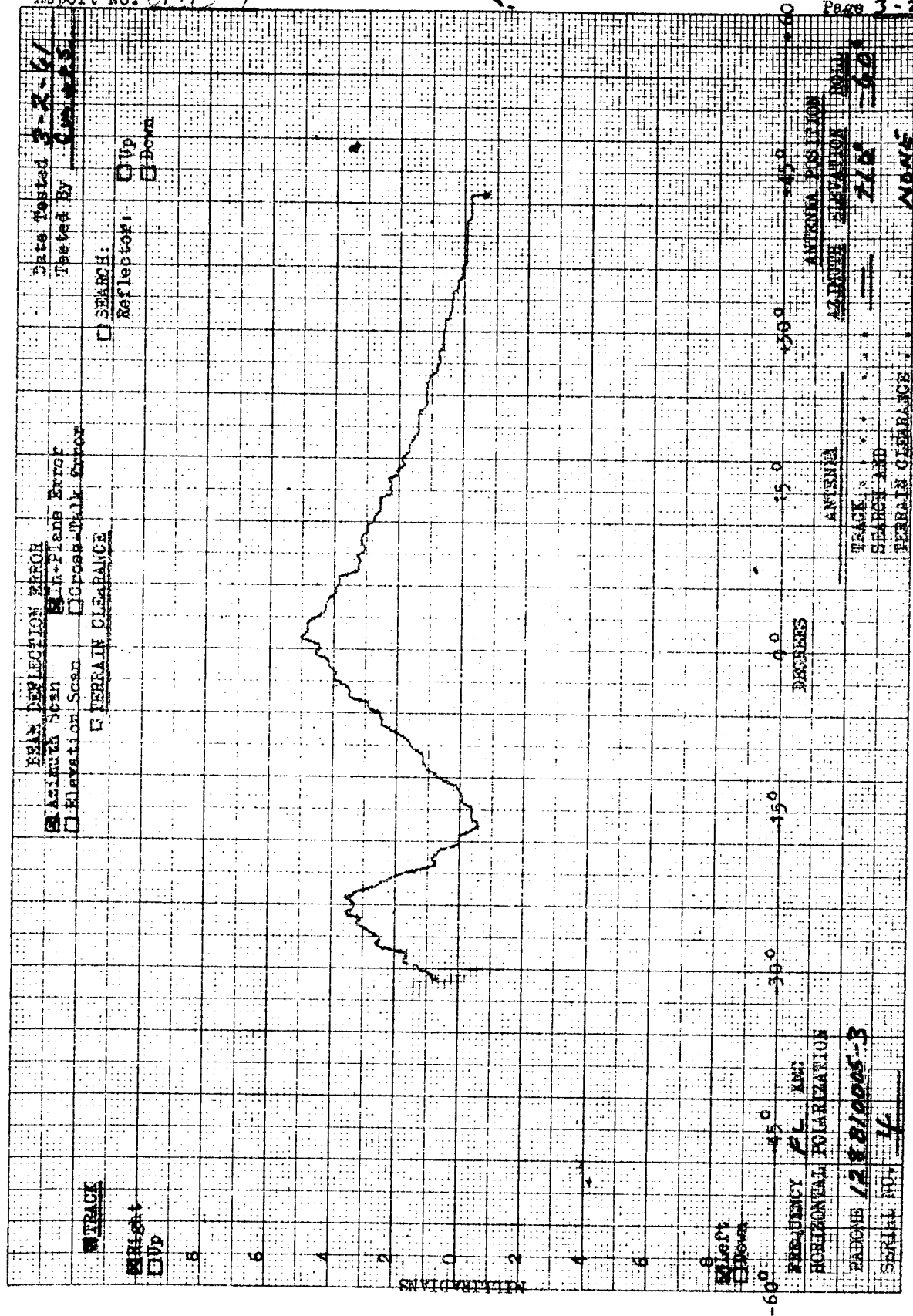
157E

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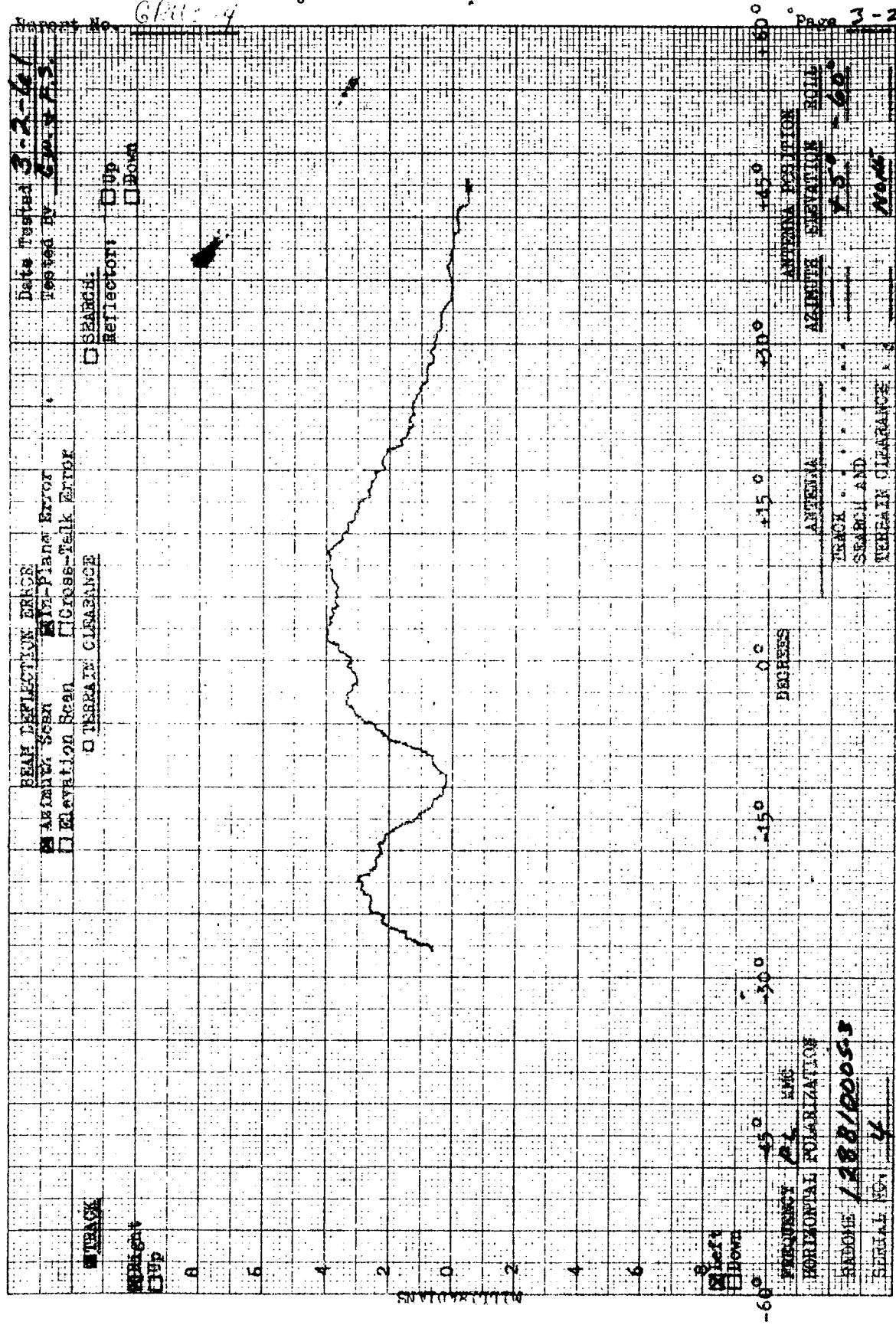
1997

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14-00000 TO 14-00000 INCH 14-00000

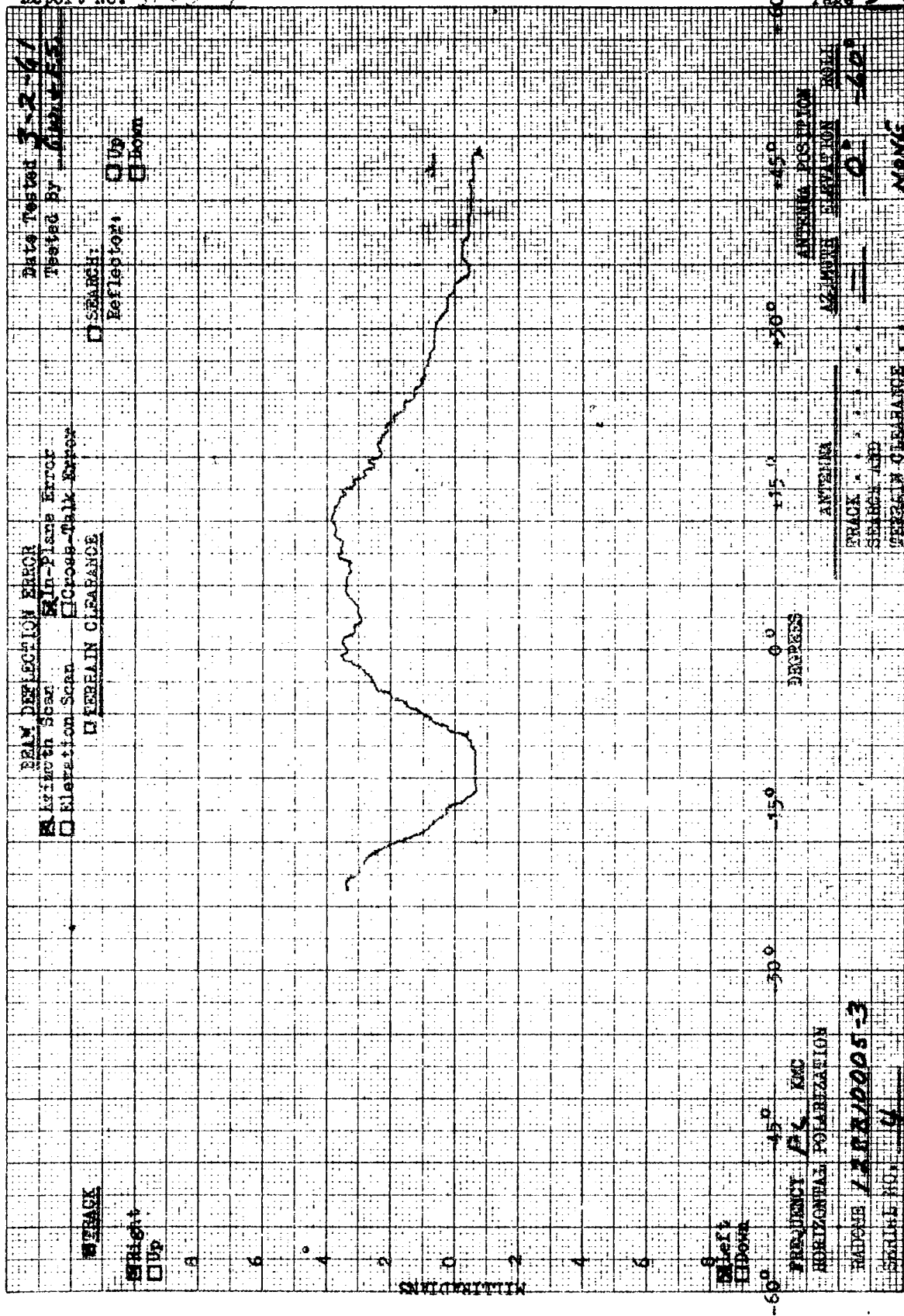


~~SECRET~~

10X10 TO 100X100 (100X100)

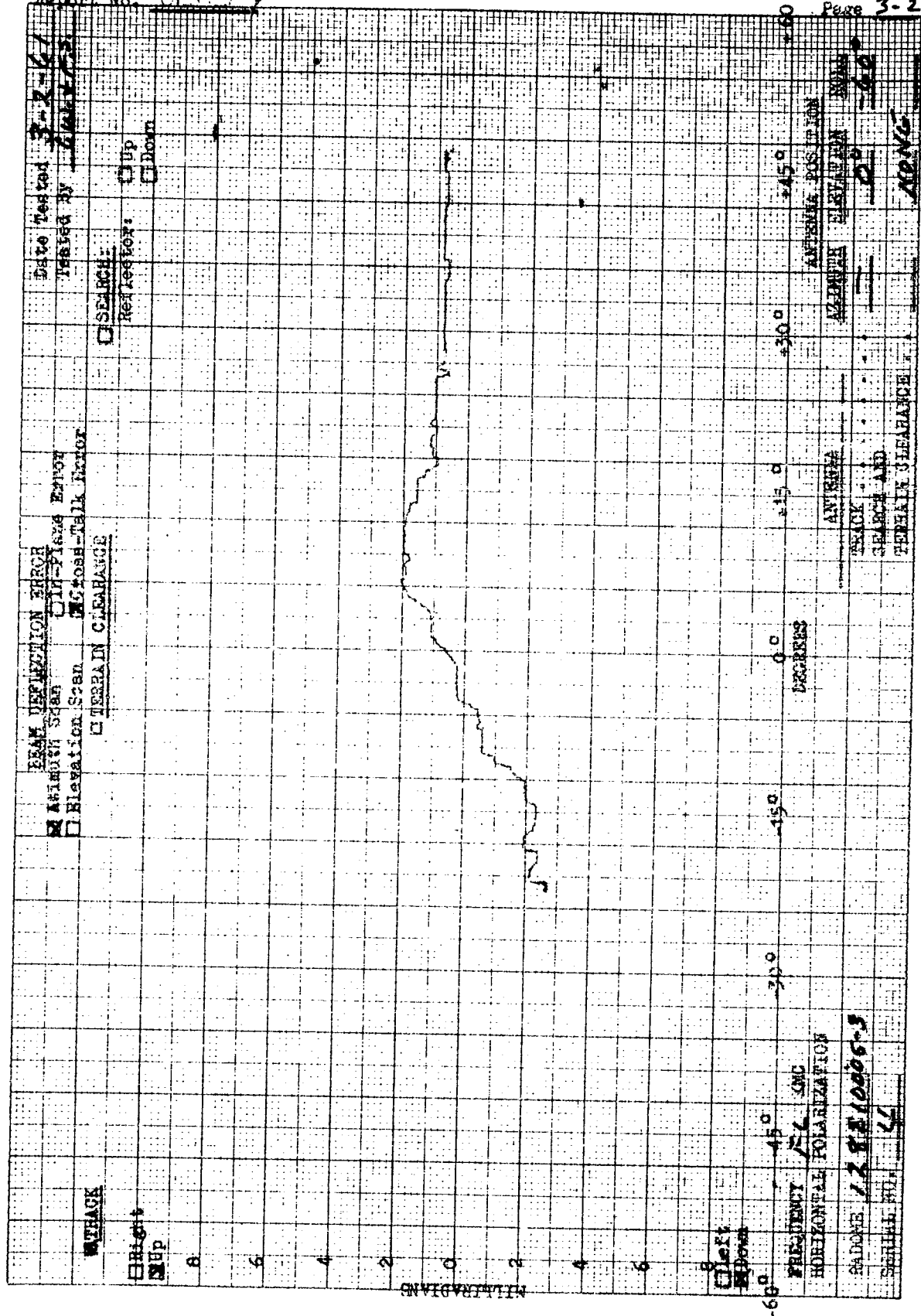
Report No. *SPUB-4*

Page *3-263*



Report No. 019154

Page 3-264



BEAM DEFINITION ERROR

☒ Azimuth Scan ☐ In-Plane Error
☐ Elevation Scan ☒ Cross-Talk Error

☐ TERRAIN CLEARANCE

Date Tested 3-2-61

Tested By 019154

☐ SEARCH

Reflector:

☐ Up

☐ Down

WINDRAKE

☐ Right

☐ Left

8

6

4

2

0

2

4

6

☐ Left

☐ Down

-60°

-45°

-30°

-15°

0°

+15°

+30°

+45°

+60°

FREQUENCY 12.8 MC

HORIZONTAL POLARIZATION

Radome 128E10006-3

Serial No. 4

ANTENNA POSITION

AZIMUTH ELEVATION

180° 0°

None

ANTENNA

TRACK

SEARCH AND

TERRAIN CLEARANCE

BEAM DEFLECTION ERROR

Antenna Scan ☒ Azimuth Error ☐ Elevation Error ☐ Cross-Talk Error ☐ Terrain Clearance

ATTACK

Deflect ☐ Up ☐ Down

Deflect ☐ Up ☐ Down

FREQUENCY FL MHz

HORIZONTAL POLARIZATION

RADONE 12881005-3

SIGNAL NO. 4

DATE TESTED 3-3-61

TESTED BY C. J. J. J.

Reflector: ☐ Up ☐ Down

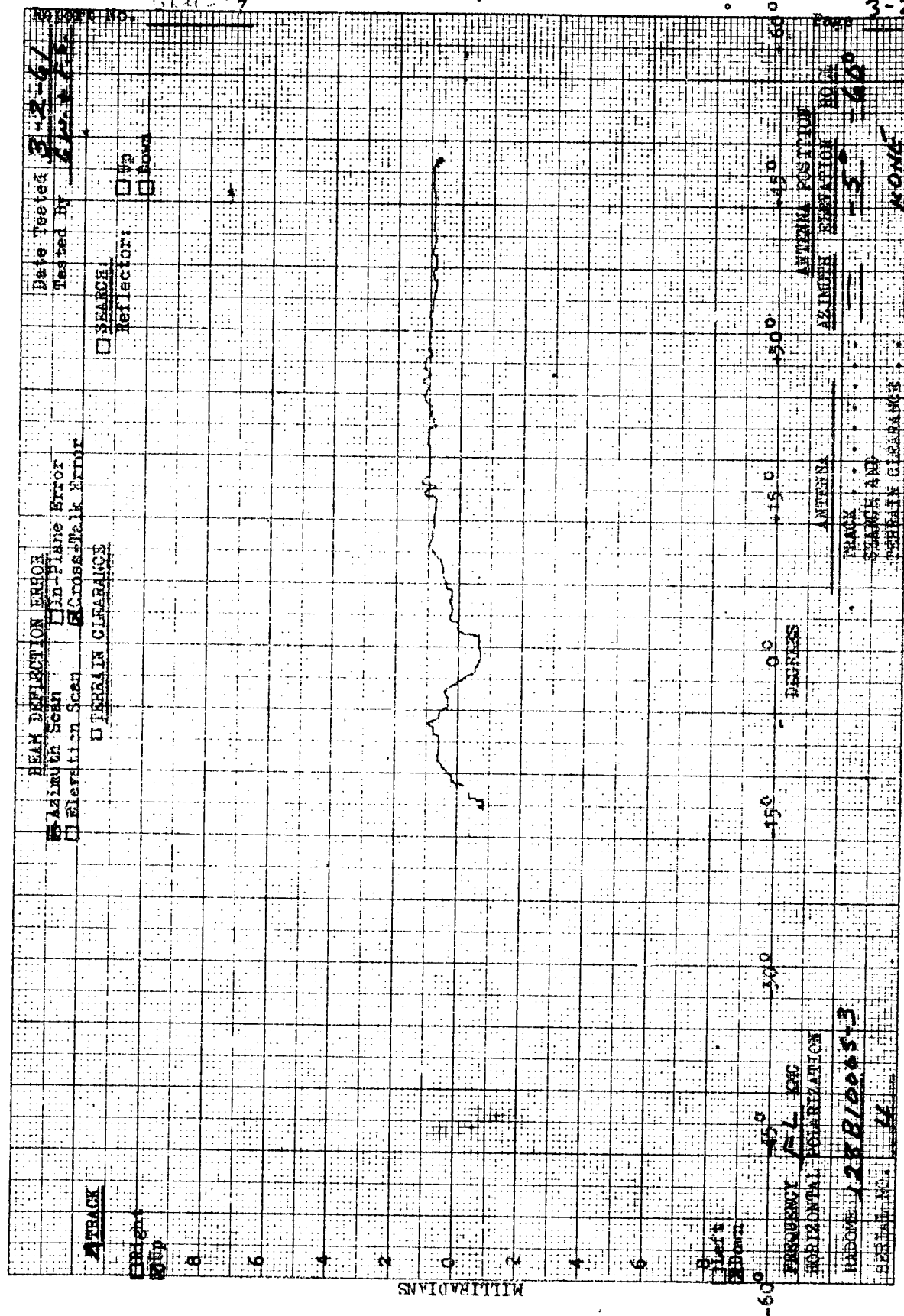
SEARCH: ☐ SEARCH

ANTENNA POSITION

AZIMUTH 0 ELEVATION 0 ROLL 0

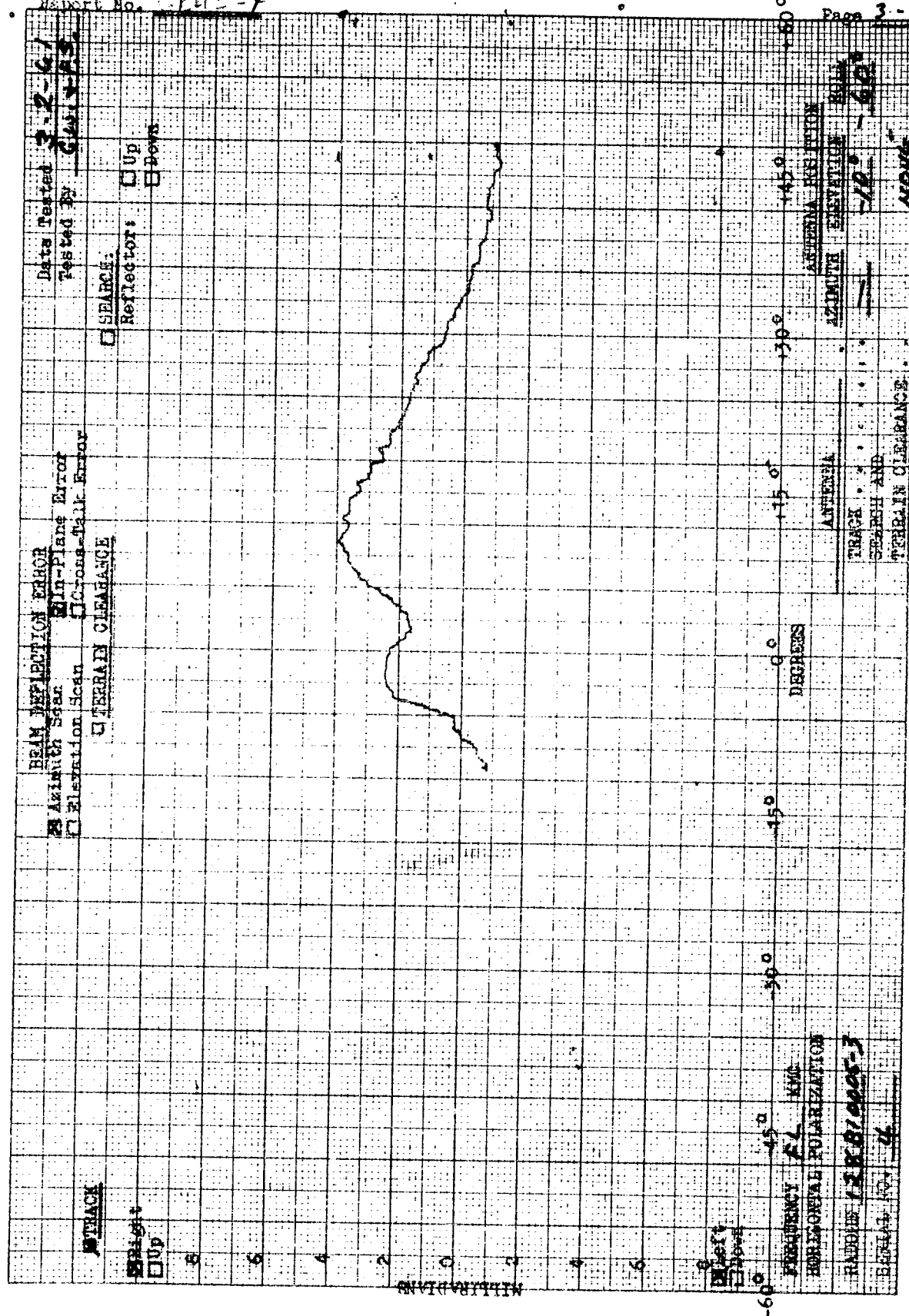
TRACK SEARCH AND TERRAIN CLEARANCE

REF ID: A61010
 REF ID: A61010



REF 10X10 TO THE 10X10 350-110

Report No. CU2-1



<input type="checkbox"/>	Asimuth Scan	<input type="checkbox"/>	Roll-Plane Error
<input type="checkbox"/>	Elevation Scan	<input checked="" type="checkbox"/>	Cross-Talk Error

0 TREATY CLARANCE

SEARCH: Refractory 3 30

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OUTRACK

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2000年
 12月
 12日

60-

FREQUENCY	F	45°	45°	45°
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6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
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21	21	21	21	21
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24	24	24	24	24
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84	84	84	84	84
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86	86	86	86	86
87	87	87	87	

FREQUENCY	7	KMC
HORIZONTAL POLARIZATION		

RADOME 12881005-3

REF ID: A61111

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2025

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SECRET

REF ID: A61010

Report No. GRU3-4 Page 3-270

Date Tested 3-2-61
 Tested By W. F. S.

BEAM DEFLECTION ERROR
☒ Azimuth Scan ☐ In-Plane Error
☐ Elevation Scan ☒ Cross-Talk Error
☐ TERRAIN CLEARANCE

SEARCH:
 Reflector: ☐ Up ☐ Down

TRACK
☐ Right ☐ Up
☐ Left ☐ Down

FREQUENCY FL KMC
 HORIZONTAL POLARIZATION
 TRACK 12 RB/0005-3
 SERIAL NO. 4

0° -30° -15° 0° +15° +30° +45° +60°

ANTENNA POSITION
 ADJUST ELEVATION 15°
 ADJUST ELEVATION 60°

TEACH SEARCH AND TERRAIN CLEARANCE

MILLIRADIANS

8 6 4 2 0 2 4 6 8

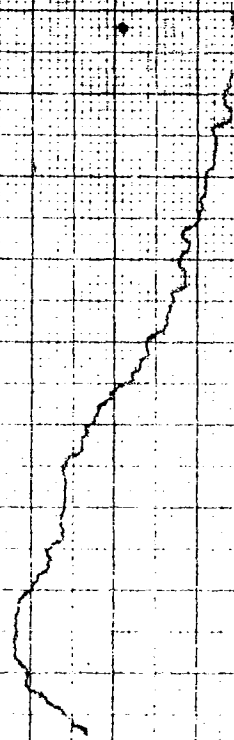
Wavy line graph across the grid.

FORM 10X10 (2/7/71) 100-110

Report No. SK113-4

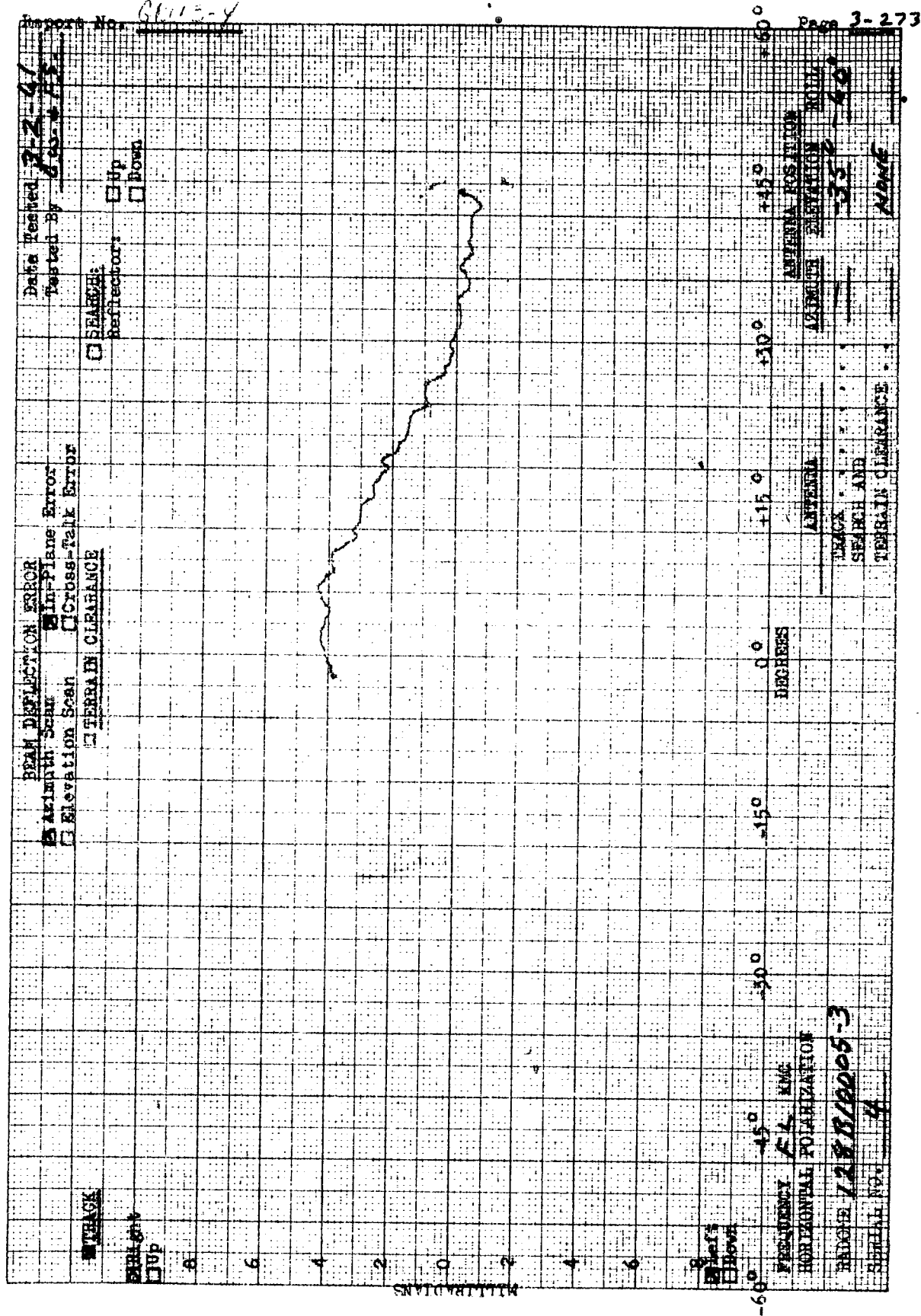
Page 3-271

BEAM DEVIATION ERROR <input checked="" type="checkbox"/> Azimuth Scan <input checked="" type="checkbox"/> In-Plane Error <input type="checkbox"/> Elevation Scan <input type="checkbox"/> Cross-Talk Error <input type="checkbox"/> TERRAIN CLEARANCE		Date Tested <u>3-3-61</u> Tested by <u>6104-1-13</u>	
<input type="checkbox"/> SEARCH Reflector: <input type="checkbox"/> Up <input type="checkbox"/> Down			
TRACK <input checked="" type="checkbox"/> Right <input type="checkbox"/> Up 8 6 4 2 0 2 4 6 8		DEGREES -60° -45° -30° -15° 0° 15° 30° 45° 60°	
FREQUENCY <u>FL</u> KMC HORIZONTAL POLARIZATION		ANTENNA POSITION ANTENNA ELEVATION <u>25°</u> TRACK <u>25°</u> SEARCH AND TERRAIN CLEARANCE	
RADOME <u>1288/0005-3</u> SERIAL NO. <u>4</u>			



BEAM DEVIATION ERROR		Date Tested	3-2-61
Antenna Scan	In-Plane Error	Tested By	6-2-61
Elevation Scan	Cross-Walk Error		
TERRAIN CLEARANCE		SEARCH	
		Reflector:	
		<input type="checkbox"/> Up	
		<input type="checkbox"/> Down	
TRACK		ANTENNA POSITION	
Left		AZIMUTH	
Right		ELEVATION	
0		-25	
60		-60	
120		-60	
180		-60	
240		-60	
300		-60	
360		-60	
420		-60	
480		-60	
540		-60	
600		-60	
660		-60	
720		-60	
780		-60	
840		-60	
900		-60	
960		-60	
1020		-60	
1080		-60	
1140		-60	
1200		-60	
1260		-60	
1320		-60	
1380		-60	
1440		-60	
1500		-60	
1560		-60	
1620		-60	
1680		-60	
1740		-60	
1800		-60	
1860		-60	
1920		-60	
1980		-60	
2040		-60	
2100		-60	
2160		-60	
2220		-60	
2280		-60	
2340		-60	
2400		-60	
2460		-60	
2520		-60	
2580		-60	
2640		-60	
2700		-60	
2760		-60	
2820		-60	
2880		-60	
2940		-60	
3000		-60	
3060		-60	
3120		-60	
3180		-60	
3240		-60	
3300		-60	
3360		-60	
3420		-60	
3480		-60	
3540		-60	
3600		-60	
3660		-60	
3720		-60	
3780		-60	
3840		-60	
3900		-60	
3960		-60	
4020		-60	
4080		-60	
4140		-60	
4200		-60	
4260		-60	
4320		-60	
4380		-60	
4440		-60	
4500		-60	
4560		-60	
4620		-60	
4680		-60	
4740		-60	
4800		-60	
4860		-60	
4920		-60	
4980		-60	
5040		-60	
5100		-60	
5160		-60	
5220		-60	
5280		-60	
5340		-60	
5400		-60	
5460		-60	
5520		-60	
5580		-60	
5640		-60	
5700		-60	
5760		-60	
5820		-60	
5880		-60	
5940		-60	
6000		-60	
6060		-60	
6120		-60	
6180		-60	
6240		-60	
6300		-60	
6360		-60	
6420		-60	
6480		-60	
6540		-60	
6600		-60	
6660		-60	
6720		-60	
6780		-60	
6840		-60	
6900		-60	
6960		-60	
7020			

10X10 TO THE 1/4 INCH 350-110



SEE INSTRUCTIONS 300110

Report No. CR11-4 Page 3-274

DATE TESTED 7-2-67
TESTED BY 6-2-67

BEAM DEFLECTION ERROR
☒ AZIMUTH SCAL ☐ IN-PLANE ERROR
☐ ELEVATION SCAL ☒ CROSS-TALK ERROR
☐ TERRAIN CLEARANCE

SEARCH:
☐ Reflector: ☐ Up ☐ Down

TRACK
 EIGHT
 UP
 8
 6
 4
 2
 0
 2
 4
 6
 8
 LEFT
 DOWN

FREQUENCY 2.4 MHz
 HORIZONTAL POLARIZATION
 RANGE 12881000-3
 SERIAL NO. 4

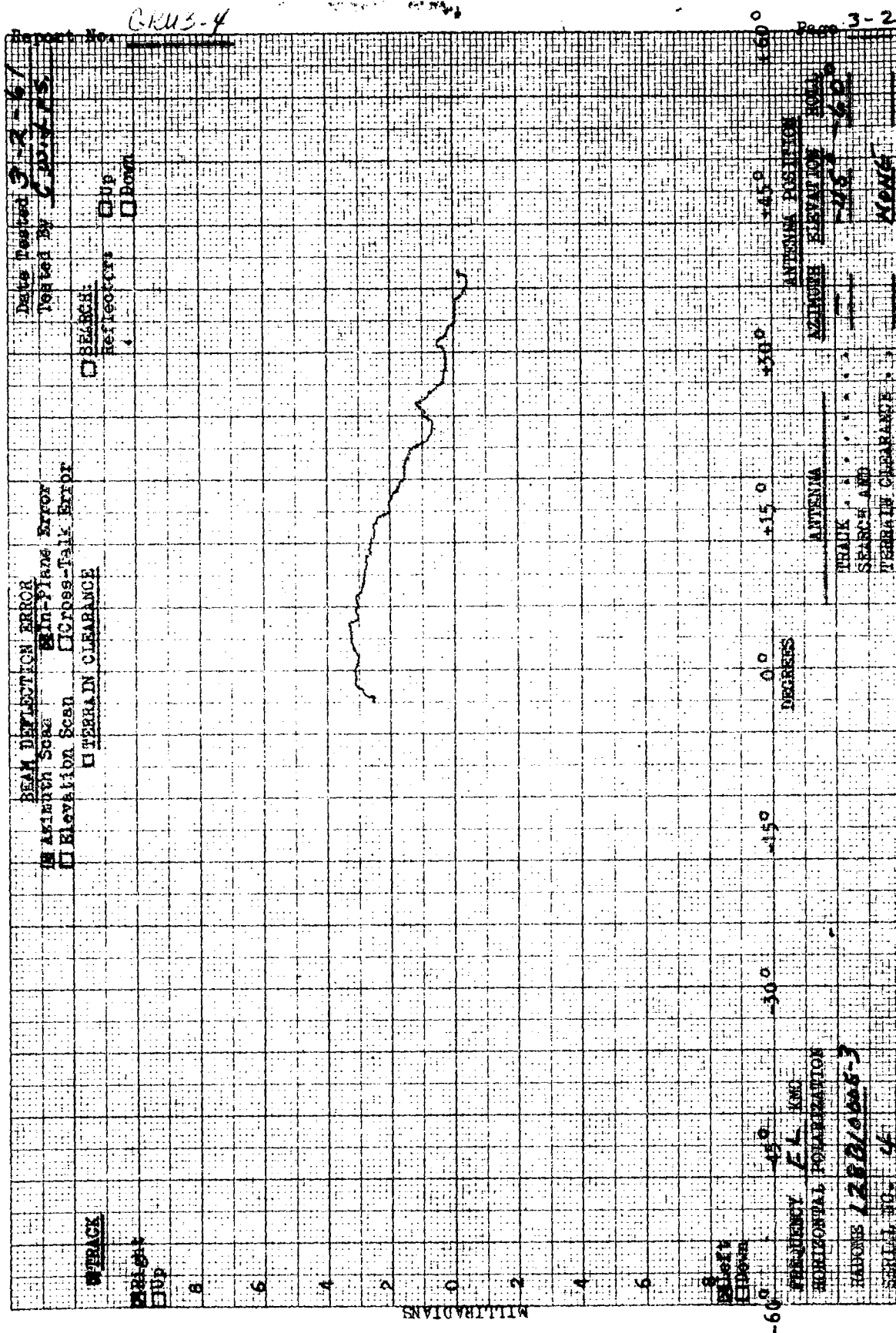
DEGREES
 -60° -50° -45° -30° -15° 0° +15° +30° +45° +60°

ANTENNA POSITION
 AZIMUTH ELEVATION
 TRACK SEARCH AND
 TERRAIN CLEARANCE

None

Handwritten: *Handwritten*

10X10 TO THE 1/2 INCH 359-116

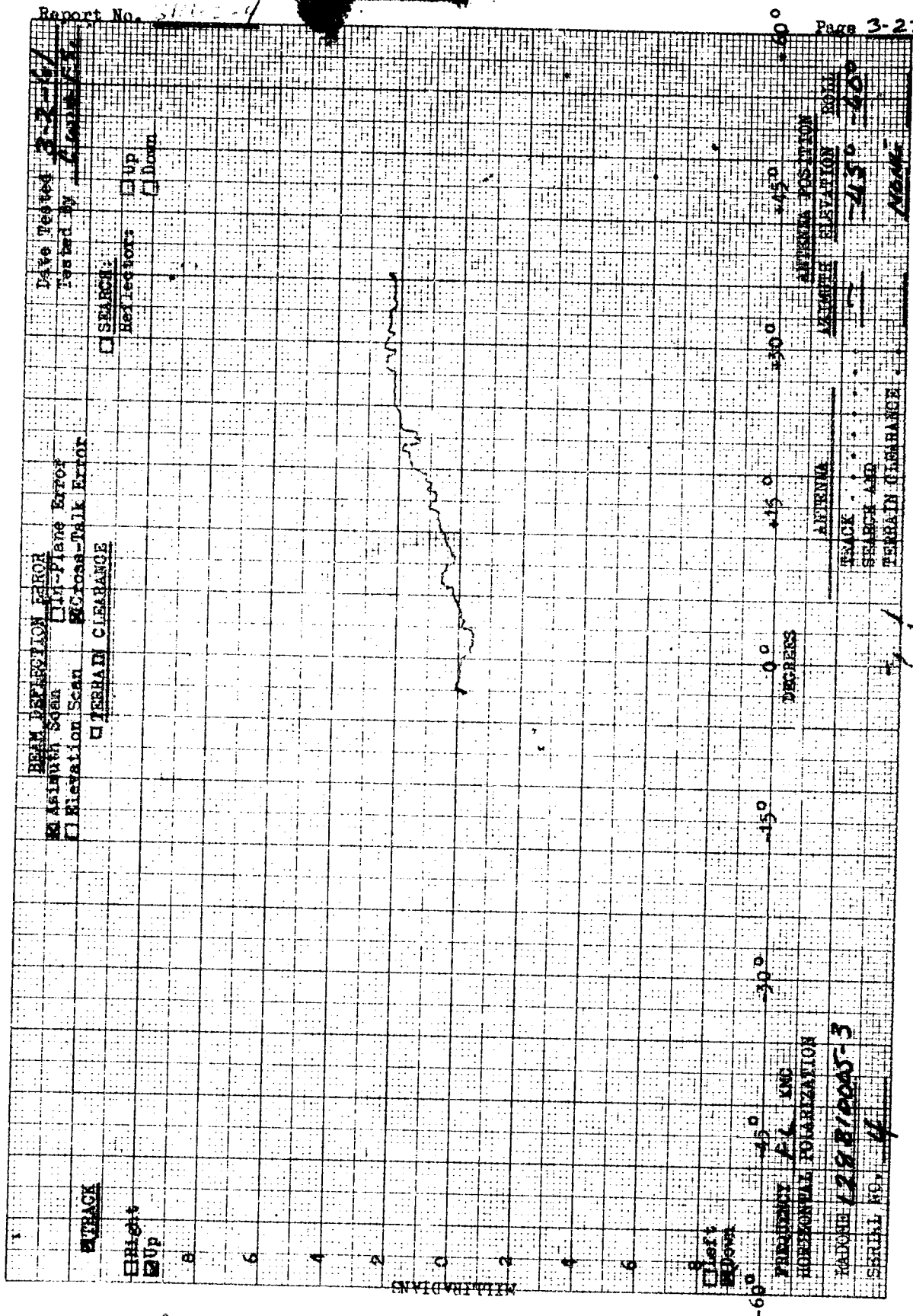


3-275

10X10 TO THE WINCH 259-1113

Report No. 511-1-1

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SECTION 41

SEARCH ANTENNA BORESIGHT ERROR

$F_H @ 0^\circ$ ROLL, REFLECTOR MID POSITION

10 X 10 TO THE 1/2 INCH 359-116

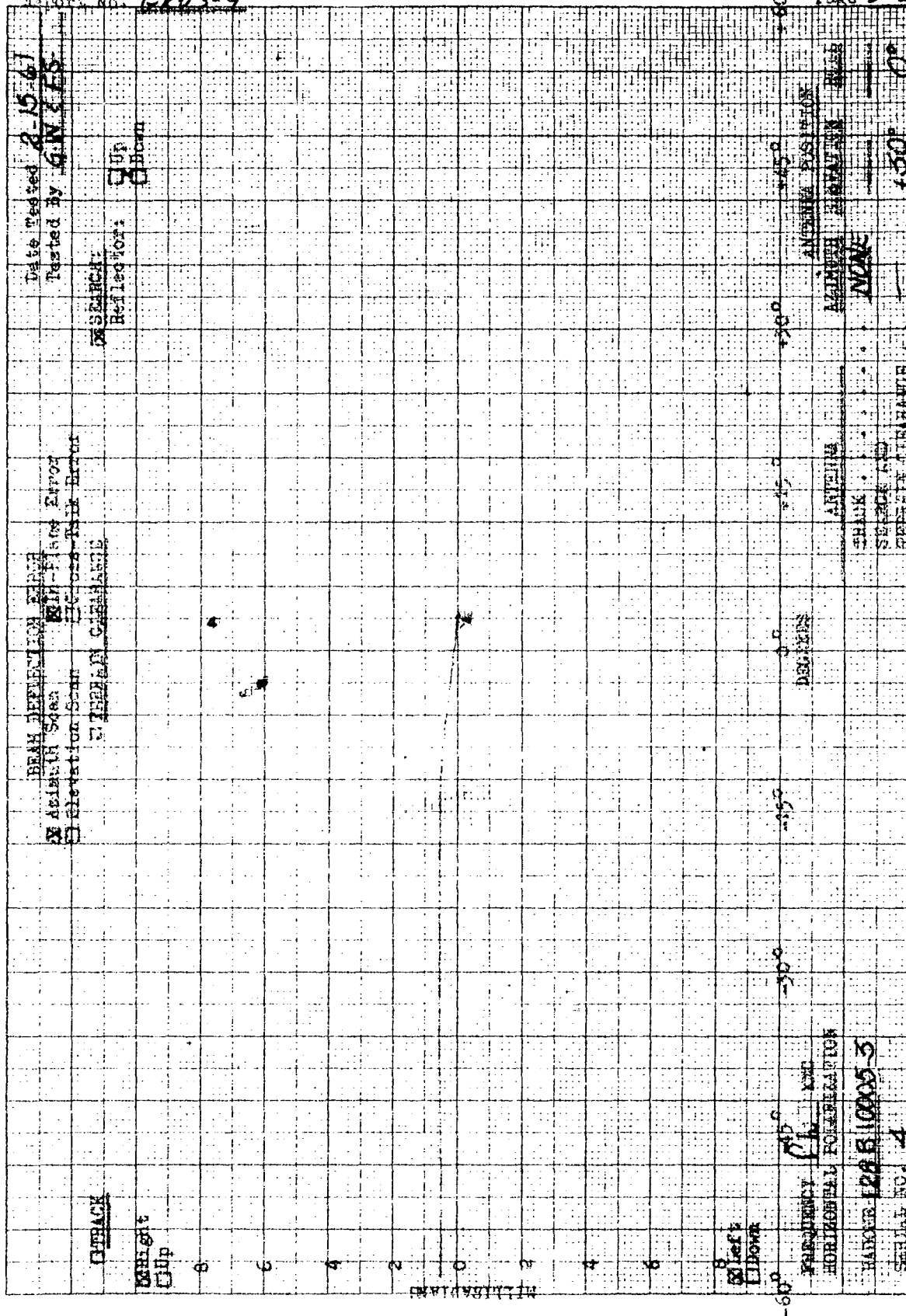
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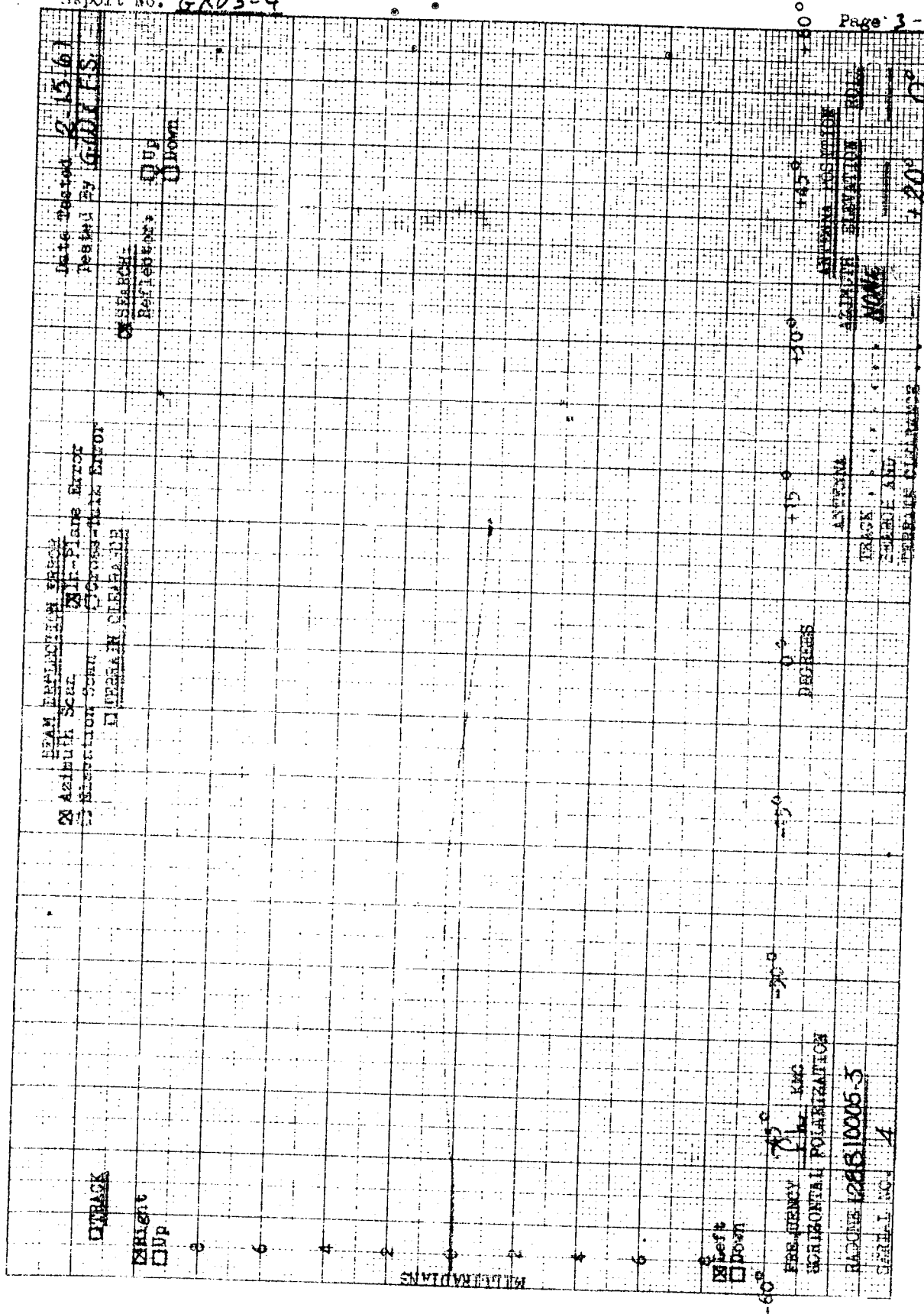
100% LEVEL

Report No. CR43-4

Page 3-279



P.E



P.E

Page 3-281

5R43-4

BEAM DEFLECTION ZERO <input checked="" type="checkbox"/> Azimuth Scan <input type="checkbox"/> Elevation Scan <input type="checkbox"/> In-Plane Scan <input type="checkbox"/> Out-of-Plane Scan <input type="checkbox"/> Terrain Clearance		Date Tested: 8-15-61 Tested By: G.W. F.S.	
SEARCH: Reflected: <input type="checkbox"/> Direct: <input type="checkbox"/>			
TRACK Bright <input type="checkbox"/> Dark <input type="checkbox"/>			
FREQUENCY 100 MHz HORIZONTAL POLARIZATION		ANTENNA POSITION ANTENNA ELEVATION 410°	
TRACK NO. 4			

P.E

☐ TRACE
☒ NIGHT
☐ DAY

Date Tested: 2-15-61
 Tested By: G.W. F.S.

REFLECTION ERROR
☒ Azimuth Error
☐ Elevation Error
☐ Distance Error

REFLECTOR: ☒ UP ☐ DOWN

FREQUENCY: 75° kHz
 HORIZONTAL POLARIZATION

RANGE: 128 B 100053
 SERIAL NO: 4

DEPRESS: -80° -75° -70° -65° -60° -55° -50° -45° -40° -35° -30° -25° -20° -15° -10° -5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45° 50° 55° 60° 65° 70° 75° 80°

ANTENNA POSITION: ☒ SEARCH AND IDENTIFY ☐ TRACK

ANTENNA: ☒ SEARCH AND IDENTIFY ☐ TRACK

REFLECTOR: ☒ SEARCH AND IDENTIFY ☐ TRACK

P. 2

[illegible]

3-283

REFLECTOR NO. GRV3-4

DATE TESTED 2-15-67

TESTED BY GEUTZ

SEARCH: ☒ REFLECTOR: ☒ CUP: ☒

EXTRA REFLECTION ERROR

☒ ANTENNA SNAKE

☐ ELEVATION ERROR

☐ ELEVATION ERROR

☐ INTERNAL CLEARANCE

UTRACK

BRIGHT CUP

0

6

4

2

0

2

4

6

8

Left

Right

FREQUENCY 10 MHz

HORIZONTAL POLARIZATION

ADGONE 128B10005-3

SERIAL NO. 4

ANTENNA POSITION

ANTENNA ELEVATION

ANTENNA

TRACE

SEARCH AND

REFLECTOR CLEARANCE

0°

10°

30°

45°

60°

75°

90°

105°

120°

135°

150°

165°

180°

SECTION 4.2

SEARCH ELEMENT FOR LIGHT ERROR

F_H @ -15° ROLL, REFLECTOR MID POSITION

DATE TESTED 2-15-6 TESTED BY G.W.F.F.S.		SEARCH: REFLECTION <input checked="" type="checkbox"/> DOWN	
BEAM DEFLECTION ERROR <input checked="" type="checkbox"/> ANGLE IN SPACE <input type="checkbox"/> DISTORTION SCAL <input type="checkbox"/> TERRAIN COMPENSATION		ANTENNA POSITION TRACK <input type="checkbox"/> ANTENNA SEARCH AND TOLERANCE CLEARANCE	
TRACK NIGHT CLIP		ANTENNA ELEVATION 100 ANTENNA ELEVATION 100	
8 6 4 2 0 2 4 6		150 100 50 0 -50 -100 -150	
FREQUENCY 100 HORIZONTAL POLARIZATION		ANTENNA POSITION TRACK <input type="checkbox"/> ANTENNA SEARCH AND TOLERANCE CLEARANCE	
HADOME 12881005-3 SERIAL NO. 4		ANTENNA POSITION TRACK <input type="checkbox"/> ANTENNA SEARCH AND TOLERANCE CLEARANCE	

P-E

BEAM IDENTIFICATION <input checked="" type="checkbox"/> Azimuth Scan <input type="checkbox"/> Elevation Scan <input type="checkbox"/> Cross-Talk Error <input type="checkbox"/> TERRAIN CLEARANCE		SEARCH Reflector: <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down		Date Tested: 2-15-61 Tested by: G.M.F.S.	
TRACK <input checked="" type="checkbox"/> Right <input type="checkbox"/> Up		ANTENNA POSITION TRACK: 0.0 ELEVATION: 0.0 DISTANCE: 0.0		ANTENNA POSITION TRACK: 0.0 ELEVATION: 0.0 DISTANCE: 0.0	
FREQUENCY 10.0 MHz POLARIZATION: None		ANTENNA POSITION TRACK: 0.0 ELEVATION: 0.0 DISTANCE: 0.0		ANTENNA POSITION TRACK: 0.0 ELEVATION: 0.0 DISTANCE: 0.0	
HAVER 17881000-2 SERIAL NO. 4		ANTENNA POSITION TRACK: 0.0 ELEVATION: 0.0 DISTANCE: 0.0		ANTENNA POSITION TRACK: 0.0 ELEVATION: 0.0 DISTANCE: 0.0	

P.E

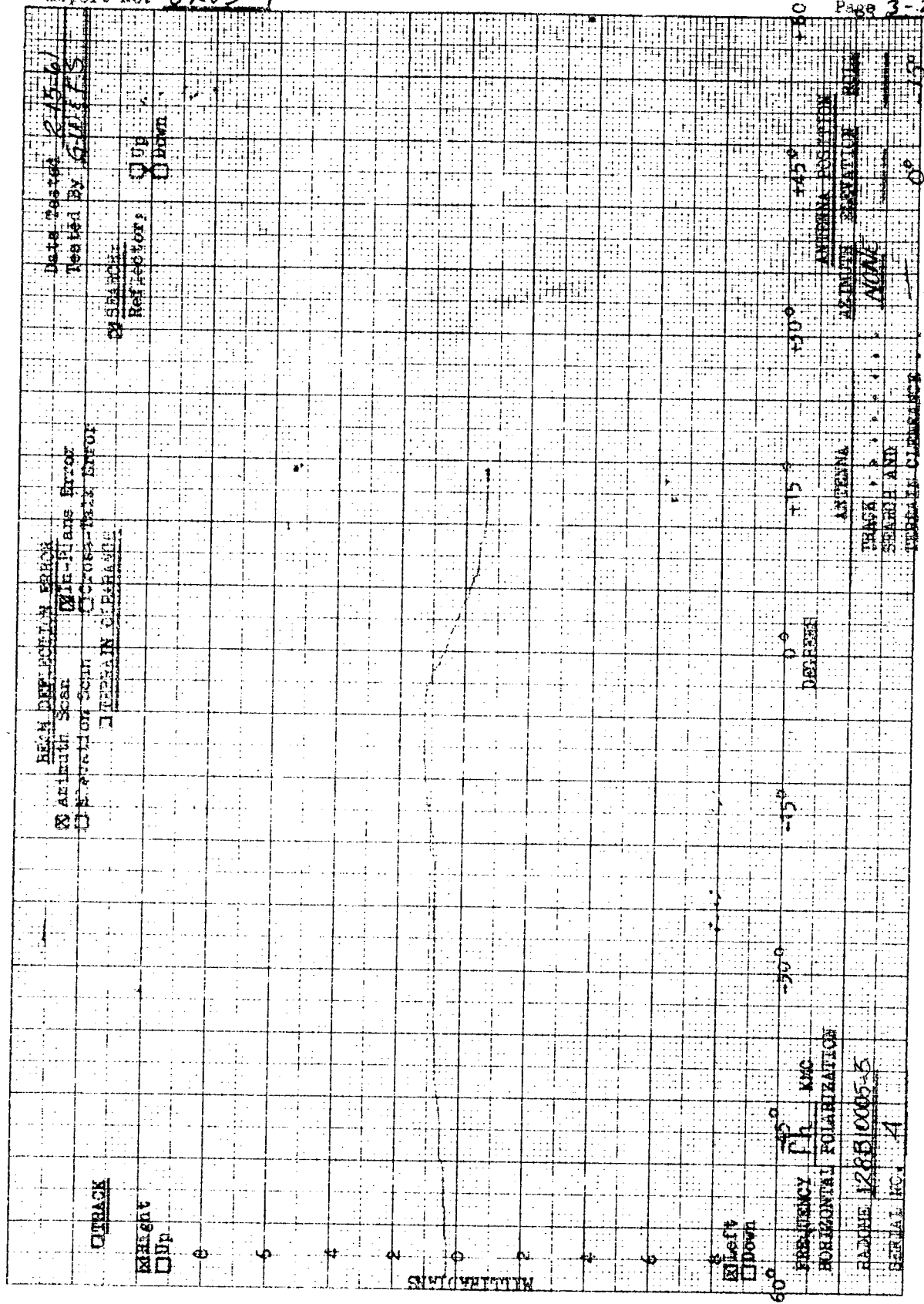
Report No. GRV3-4

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<input type="checkbox"/> TRACK <input checked="" type="checkbox"/> Right <input type="checkbox"/> Up		BEAM DEFLECTION CIRCUIT <input checked="" type="checkbox"/> Azimuth Source <input type="checkbox"/> ELEVATION SOURCE <input type="checkbox"/> FIRE-TO-TALE ERROR <input type="checkbox"/> FIRE-TO-TALE ERROR <input type="checkbox"/> FIRE-TO-TALE ERROR		Date Tested <u>8-15-61</u> Tested By <u>G.M. F.S.</u> Reflector: <input type="checkbox"/> UP <input type="checkbox"/> DOWN	
FREQUENCY <u>45°</u> MHz HORIZONTAL POLARIZATION REFLECTOR <u>1261310005-5</u> SERIAL NO. <u>4</u>		ANTENNA POSITION ANTENNA ELEVATION <u>3011</u> TRACK AND SEARCH AND TERRAIN CLEARANCE NONE		-60° -45° -30° -15° 0° 15° 30° 45° 60° DEGREES	

P.E

10X10 GRID WITH 100X100
10X10 GRID WITH 100X100



Date Tested 2-15-61
Tested By GUTTS

Reflector: ☐ UP ☐ DOWN

BEAM DEFLECTION ERROR
☒ Azimuth Scan ☐ In-Plane Error
☐ Elevation Scan ☐ Cross-Hair Error
☐ THERMAL CIRCULAR

CUTBACK

Reflected ☐ UP ☐ DOWN

Left ☐ Right ☐ DOWN

FREQUENCY 1000 KMC
HORIZONTAL POLARIZATION

RADAR 128510005-5

SERIAL NO. 4

DEGREES

ANTENNA

SEARCH AND

THREAT CLEARANCE

ANTENNA POSITION

ANTENNA ELEVATION

ANTENNA

0°

P.E

FORM 10X10 TO THE 4TH EDITION 300-110
OF 11-1-61

Report No. GRU354

Page 3-296

<input type="checkbox"/> TRACK <input checked="" type="checkbox"/> RIGHT <input type="checkbox"/> UP		BEAM DEFLECTION ERROR <input checked="" type="checkbox"/> Azimuth Scan <input type="checkbox"/> Elevation Scan <input type="checkbox"/> Cross-Talk Error <input type="checkbox"/> TERRAIN CLEARANCE		Date Tested 8-15-61 Tested By G.W.F.S. SEARCH Reflector: <input type="checkbox"/> Up <input type="checkbox"/> Down	
MILLIRADIANS 8 6 4 2 0 2 4 6		DEGREES 45 30 15 0 15 30 45		ANTENNA POSITION ANTENNA TRACK SEARCH NO TERRAIN CLEARANCE	
FREQUENCY 1000 HORIZONTAL POLARIZATION		1000 1000		ANTENNA POSITION ANTENNA TRACK SEARCH NO TERRAIN CLEARANCE	
RADOTE 128810003-3		128810003-3		ANTENNA POSITION ANTENNA TRACK SEARCH NO TERRAIN CLEARANCE	
SERIAL NO. 4		4		ANTENNA POSITION ANTENNA TRACK SEARCH NO TERRAIN CLEARANCE	

P-E

Report Form 10-1 (Rev. 1-64)

DATE TESTED: 2/15/67

TESTED BY: G. J. J. J.

REFLECTOR: ☐ Up ☐ Down

BEAM DEFLECTION: ☐ None ☐ Small ☐ Large

ASIMUTH SCALING: ☐ None ☐ Small ☐ Large

ELEVATION SCALING: ☐ None ☐ Small ☐ Large

TRACK AND SEARCH: ☐ None ☐ Small ☐ Large

DETERMINATION: ☐ None ☐ Small ☐ Large

DATE: 12/15/67

TIME: 14:00

LOCATION: 12/15/67

REMARKS: 12/15/67

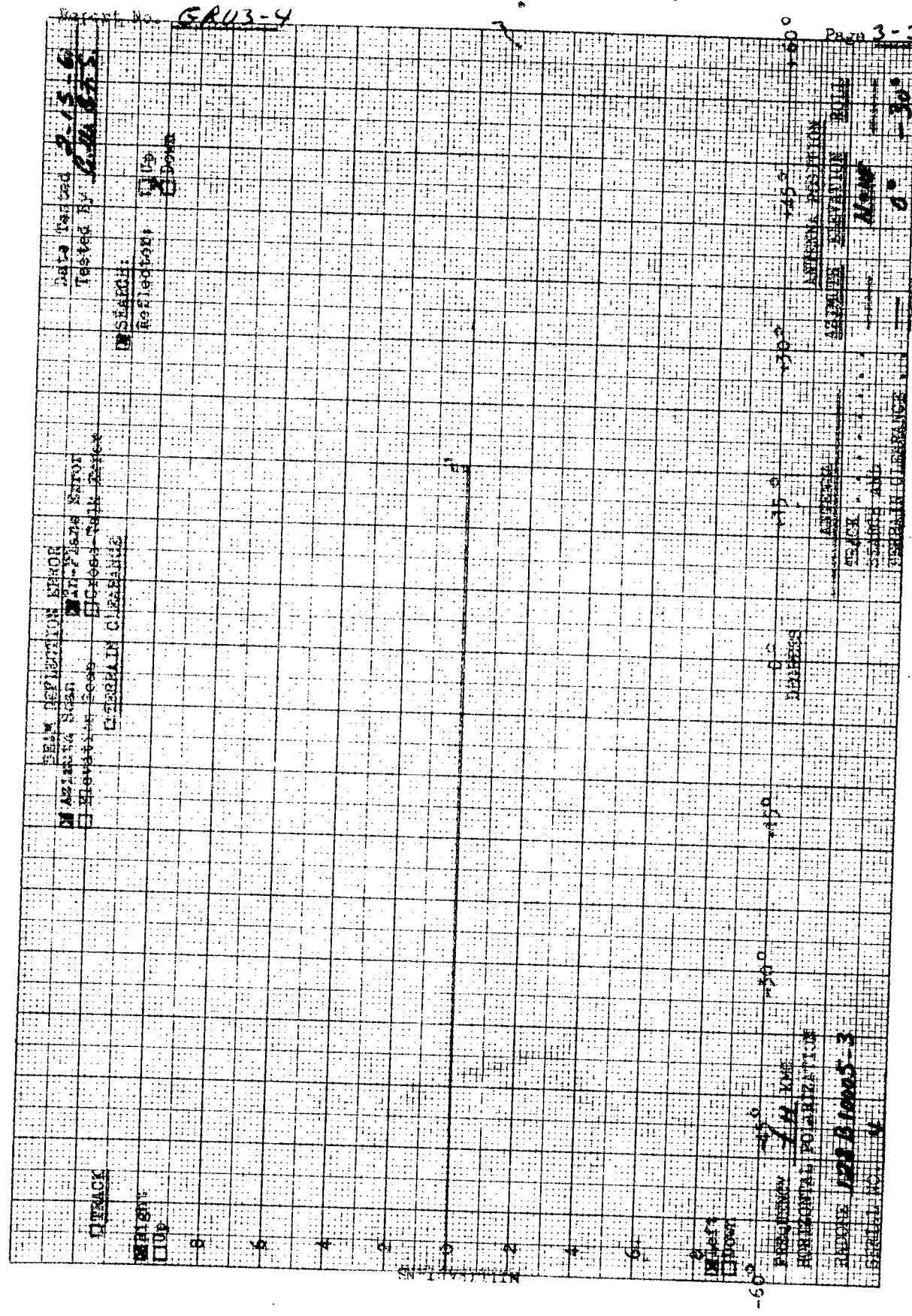
SECTION 45

SEARCH ANTENNA FORESIGHT ERROR

FH @ -30° ROLL, REFLECTOR MID POSITION

THE BRUNSWICK-BALKE-COLLENDER COMPANY

REF 10X10 TO THE INCH 359-110
 REF 10X10 TO THE INCH 359-110



Date Tested 2-15-6
 Tested By GRU3-4

REFLECTION
 Reflected: ☒ Up
☒ Down

REFLECTION ERROR
☒ Azimuth Error
☒ Elevation Error
☒ Cross-Talk Error
☒ Terrain Clearance

TRACK

WEIGHT
 100

WEIGHT
 100

FREQUENCY 12.1 KHz
 HORIZONTAL POLARIZATION

ROUTE 121 B 10005-3

SHOOT NO. 1

ANTENNA POSITION
 ANTENNA ELEVATION 100
 TRACK 100
 SHOOT NO. 1

ANTENNA POSITION
 ANTENNA ELEVATION 100
 TRACK 100
 SHOOT NO. 1

100 % Level

10X10 TO THE WINCH 352-116
KNOX ELECTRONICS CO.

Report No. GRU3-4

Date Tested 8-15-61
Tested by GWJ/S

☒ SEARCH
Reflector: ☒ Up ☒ Down

BIAM DEFLECTION ERROR
☒ Azimuth Error
☒ Elevation Error
☒ Terrain Clearance

TRACK
☒ High
☐ Low

REFLECTOR
☒ Left
☒ Down

FREQUENCY 11.1 MHz
HORIZONTAL POLARIZATION

RANGE 1286000053
SERIAL NO. 4

DEGREES
 -60° -45° -30° -15° 0° 15° 30° 45° 60°

ANTENNA POSITIVE
ANTENNA NEGATIVE
ANTENNA ELEVATION
ANTENNA HORIZ.

TRACK
SEARCH
TERRAIN CLEARANCE

P-E

GRU3-4

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<p>BEAM DEFLECTION ERROR</p> <p><input checked="" type="checkbox"/> Azimuth Error</p> <p><input type="checkbox"/> Elevation Error</p> <p><input type="checkbox"/> Cross-Talk Error</p> <p><input type="checkbox"/> TERRAIN CLEARANCE</p>		<p>Date Tested: 8-15-61</p> <p>Tested By: G.M. 115</p>	
<p>REFLECTOR</p> <p>Reflector: <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down</p>		<p>ANTENNA POSITION</p> <p>ANTENNA: <input checked="" type="checkbox"/> Azimuth <input checked="" type="checkbox"/> Elevation <input checked="" type="checkbox"/> Roll</p>	
<p>TRACK</p> <p>TRACK: <input checked="" type="checkbox"/> Azimuth <input checked="" type="checkbox"/> Elevation <input checked="" type="checkbox"/> Roll</p>		<p>DEGREES</p> <p>DEGREES: <input checked="" type="checkbox"/> Azimuth <input checked="" type="checkbox"/> Elevation <input checked="" type="checkbox"/> Roll</p>	
<p>WRIGHT</p> <p>WRIGHT: <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down</p>		<p>ANTENNA</p> <p>ANTENNA: <input checked="" type="checkbox"/> Azimuth <input checked="" type="checkbox"/> Elevation <input checked="" type="checkbox"/> Roll</p>	
<p>EXISTS</p> <p>EXISTS: <input checked="" type="checkbox"/> Azimuth <input checked="" type="checkbox"/> Elevation <input checked="" type="checkbox"/> Roll</p>		<p>TRACK</p> <p>TRACK: <input checked="" type="checkbox"/> Azimuth <input checked="" type="checkbox"/> Elevation <input checked="" type="checkbox"/> Roll</p>	
<p>FREQUENCY</p> <p>FREQUENCY: 128.8 KHz</p>		<p>ANTENNA</p> <p>ANTENNA: <input checked="" type="checkbox"/> Azimuth <input checked="" type="checkbox"/> Elevation <input checked="" type="checkbox"/> Roll</p>	
<p>HORIZONTAL POLARIZATION</p> <p>HORIZONTAL POLARIZATION: 128.8 KHz</p>		<p>TRACK</p> <p>TRACK: <input checked="" type="checkbox"/> Azimuth <input checked="" type="checkbox"/> Elevation <input checked="" type="checkbox"/> Roll</p>	
<p>SERIAL NO.</p> <p>SERIAL NO.: 1</p>		<p>ANTENNA</p> <p>ANTENNA: <input checked="" type="checkbox"/> Azimuth <input checked="" type="checkbox"/> Elevation <input checked="" type="checkbox"/> Roll</p>	

Report No. GRU3-4

Date Tested 2-15-66
Tested by GRU3-4

☒ SEARCH
Reflector: ☒ Up ☒ Down

BEAM DEFLECTION ERROR
☒ Azimuth Error
☒ Elevation Error
☒ In-Plane Error
☒ Cross-Talk Error
☒ TERRAIN CLEARANCE

TRACK
☒ Right
☒ Up

8
6
4
2
0
2
4
6
8
Miles/Hours

Frequency 100 MHz
Horizontal Polarization

Barometric Pressure 1285 mm Hg
Serial No. 4

DEGREES
-60° -50° -40° -30° -20° -10° 0° 10° 20° 30° 40° 50° 60°

ANTENNA POSITION
ANTENNA ELEVATION
ANTENNA DIRECTION
TRACK
STATION AND
TERRAIN CLEARANCE

BEAM DEFLECTION ERROR <input checked="" type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error <input type="checkbox"/> Distance Error <input type="checkbox"/> Terrain Clearance		Date Tested 2-15-61 Tested By G.M. S.F.S. Reflector: <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down	
TRACK Bright Out		TRACK SEARCH AND TERRAIN CLEARANCE	
FREQUENCY 10.0 KMC HORIZONTAL POLARIZATION		ANTENA POSITION ANTENA ELEVATION 0.00	
HADDER 12881005 3		TRACK SEARCH AND TERRAIN CLEARANCE	
SERIAL NO. 4		ANTENA POSITION ANTENA ELEVATION 0.00	

10X INTO THE LINC 359-110
10X INTO THE LINC 359-110

Report No. GRU3-4

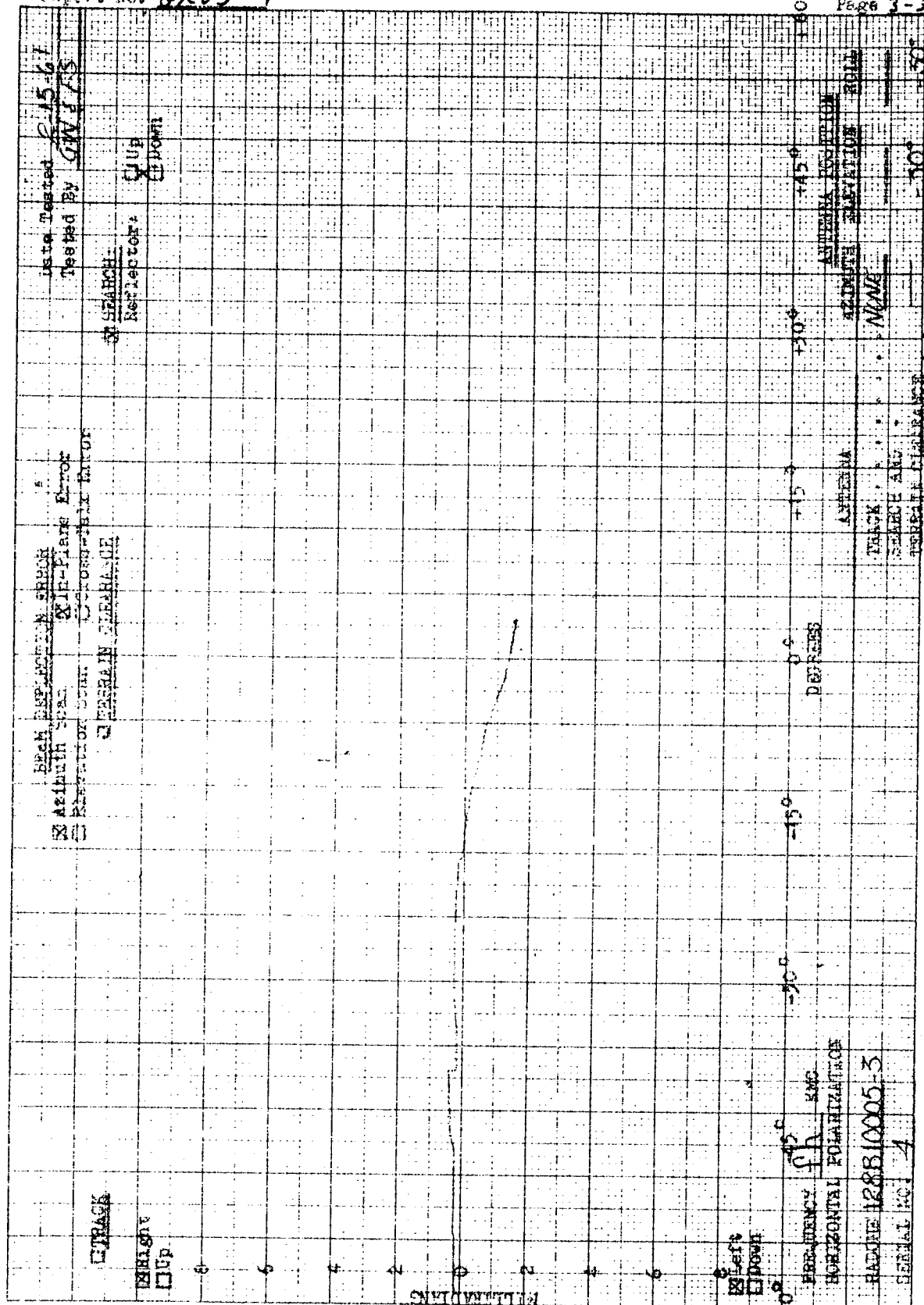
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<input checked="" type="checkbox"/> BEAM DEFLECTION ERROR <input checked="" type="checkbox"/> Azimuth Span <input checked="" type="checkbox"/> Min-Angle Error <input checked="" type="checkbox"/> Elevation Span <input checked="" type="checkbox"/> Max-Angle Error <input checked="" type="checkbox"/> SEARCH <input checked="" type="checkbox"/> REFLECTOR: <input checked="" type="checkbox"/> UP <input checked="" type="checkbox"/> DOWN		Date Tested: 8-15-61 Tested By: GANES	
UTRACK Upright <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down		ANTENNA POSITION ANTENNA ELEVATION TRACK <input checked="" type="checkbox"/> SEARCH AND THERMAL CLEARANCE	
FREQUENCY 77.5 KHZ HORIZONTAL POLARIZATION RADONE 1288 10005-3 SERIAL NO. 4		DECIBELS -60° -30° 0° +30° +45° +60°	

P.E

DATE TESTED 2-15-61		TESTED BY G. W. L. S.	
3220 DEVIATION ERROR <input checked="" type="checkbox"/> Azimuth Error <input checked="" type="checkbox"/> Elevation Error <input checked="" type="checkbox"/> Crossed-Jelly Error <input checked="" type="checkbox"/> TERRAIN CLEARANCE		REFLECTION: <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down	
TRACK HEIGHT CLIP		ANTENNA POSITION ANTENNA ELEVATION TRACK SEARCH AND TERRAIN CLEARANCE	
FREQUENCY 1.1 KNC HORIZONTAL POLARIZATION 12831005-3 SERIAL NO. 4		DEGREES 30.0 45.0 60.0 75.0 90.0 105.0 120.0 135.0 150.0 165.0 180.0 195.0 210.0 225.0 240.0 255.0 270.0 285.0 300.0 315.0 330.0 345.0 360.0	

W
C



EF

SECTION 44

SEARCH ANTENNA BORTSIGHT ERROR

Fig 4 -60° ROLL, REFLECTOR MID POSITION

<input type="checkbox"/> TRACK <input checked="" type="checkbox"/> RIGHT <input type="checkbox"/> LEFT		BEAM DEFLECTION ERROR <input checked="" type="checkbox"/> ASIMUTH SCAL <input type="checkbox"/> ELEVATION SCAL <input type="checkbox"/> THERMAL CLEARANCE		Data Tested: 2-15-61 Tested By: GRU 3-4 Reflected: DOWN	
ANTENNA POSITION ANTENNA ELEVATION ANTENNA AZIMUTH		ANTENNA POSITION ANTENNA ELEVATION ANTENNA AZIMUTH		ANTENNA POSITION ANTENNA ELEVATION ANTENNA AZIMUTH	
TRACK AND SEARCH THERMAL CLEARANCE		TRACK AND SEARCH THERMAL CLEARANCE		TRACK AND SEARCH THERMAL CLEARANCE	
FREQUENCY: 7.4 MHz MODULATOR: 7.4 MHz RANGE: 1000-1000-3 FIELD NO.: 4		FREQUENCY: 7.4 MHz MODULATOR: 7.4 MHz RANGE: 1000-1000-3 FIELD NO.: 4		FREQUENCY: 7.4 MHz MODULATOR: 7.4 MHz RANGE: 1000-1000-3 FIELD NO.: 4	

<input checked="" type="checkbox"/> TRACK <input checked="" type="checkbox"/> Night <input type="checkbox"/> Up <input type="checkbox"/> Down		BEAM DIRECTION TRACK <input checked="" type="checkbox"/> Azimuth Seen <input type="checkbox"/> In-Plane Error <input type="checkbox"/> Out-of-Plane Error <input type="checkbox"/> Terrain Clearance		Date Tested: 2-15-61 Tested By: GW & FS Reflector: <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down	
FREQUENCY: 450 MHz HORIZONTAL POLARIZATION		DISTANCE: 1500 ANTENNA POSITION: 450 AZIMUTH ELEVATION: 450 TRACK: 450 SEARCH AND TERRAIN CLEARANCE: 450		RADAR: 128B10005-3 SERIAL NO.: 4	

22

BEAM REFLECTION ERROR		Date tested 2-15-61	
<input checked="" type="checkbox"/> Asimuth Error		Tested by GWA:FS	
<input checked="" type="checkbox"/> In-Plane Error			
<input type="checkbox"/> Out-of-Plane Error			
<input type="checkbox"/> Terrain Clearance			
SEARCH		Reflector: <input checked="" type="checkbox"/> Up <input checked="" type="checkbox"/> Down	
TRACK			
<input checked="" type="checkbox"/> Right			
<input type="checkbox"/> Left			
<input type="checkbox"/> Up			
<input type="checkbox"/> Down			
FREQUENCY 1.4 MHz		ANTENNA POSITION	
HORIZONTAL POLARIZATION		ANTENNA ELEVATION 100m	
RANGE 128510005-3		TRACK NONE	
SERIAL NO. 4		TERRAIN CLEARANCE	

Date Tested 8-15-61
Tested By C.W. F.S.

☒ SEARCH: ☐ REFLECTOR: ☐ EP ☒ DC

TRACK

2000

+

4

4

4

6

✦

•

5

☒ Left ☐ Down

FREQUENCY Ph KMC
HORIZONTAL POLARIZATION

DATE 128810005-3

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STATE OF NEW YORK

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GRU 3-4

Page 3-316

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+60°

+45°

+30°

+15°

0°

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-30°

-45°

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-90°

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-165°

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-225°

-240°

-255°

-270°

-285°

-300°

-315°

-330°

-345°

-360°

+360°

+345°

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REF No. **GRV3-4**

BEAM REFLECTION ERROR

☒ Azimuth Seen ☒ Az-Plane Error

☐ Elevation Seen ☐ Elevation Error

☐ Beam Distance

Date Tested **2-15-61**

Tested By **G.W.S. ES**

Reflector: ☒ Up ☐ Down

Page **3-317**

TRACK

☐ Left ☐ Down

FREQUENCY **1288** **MHz**

HORIZONTAL POLARIZATION

RADOME **128810005.3**

SERIAL NO. **4**

DEGREES

ANTENNA POSITION

ANTENNA ELEVATION

TRACK

SEARCH AND

REFLECTOR CLEARANCE

60° **45°** **30°** **15°** **0°** **15°** **30°** **45°** **60°**

<input type="checkbox"/> TRACK <input checked="" type="checkbox"/> RIGHT <input type="checkbox"/> UP		PEAK DEVIATION ERROR <input checked="" type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error <input type="checkbox"/> Cross-Hair Error REMAIN OBSERVABLE		Date Tested 2-15-61 Tested By G.H. F.S.	
<input checked="" type="checkbox"/> SEARCH Reflector: <input type="checkbox"/> Up <input checked="" type="checkbox"/> Down					
FREQUENCY 10.1 MC HORIZONTAL POLARIZATION		PRESS		ANTENNA POSITION AZIMUTH ELEVATION	
RANGE 128 B10005-3 SERIAL NO. 4		TRACK SEARCH AN. FREQUENCY CHANNEL		NONE NONE NONE	

Q.E.

Report No. G-203-4

Page 3-319

Use Tested 2-15-75
AG 443621

~~SECRET~~

Ref: 100-100000000

<input checked="" type="checkbox"/> Beam Reflection Ratio	<input checked="" type="checkbox"/> Min-Plane Error
<input checked="" type="checkbox"/> Asymmetry Scan	<input checked="" type="checkbox"/> Lost-Tilt Error
<input type="checkbox"/> Rotation Scan	<input type="checkbox"/> Rotation Scan

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FREQUENCY ω KHz
HORIZONTAL POLARIZATION

ADDRESSES 128 B 10005-5

SECRET

DATE

WINTER

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FILED AT
FEDERAL CLERK

ANTENNA POSITION

THE COLLEGE NEWS

7/10/24

FILED AT
FEDERAL CLERK

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P.F.

GRU3-4

Date tested 2-15-61
Tested by G. W. J. S.

SEARCH
Net Vector: ☒ Up ☒ Down

BEAM DEFLECTION IN DEGREES
☒ Azimuth Error
☒ Elevation Error
☒ Cross-Talk Error
☒ FREQUENCY CLEARANCE

UTRACK
HEIGHT
☒ Up
☐ Down

DEGREES

ANTENNA POSITION
ALIGNMENT ELEVATION
TRACK SEARCH AND
PERCENT CLEARANCE

FREQUENCY 1286 MHz
HORIZONTAL POLARIZATION
RANGE 1286 10005-5
SERIAL NO. 4

-60° -45° -30° -15° 0° 15° 30° 45° 60°

P.E

SECTION 45

SEARCH ANTENNA BORESIGHT ERROR

$F_L @ 0^\circ$ ROLL, REFLECTOR MID POSITION

THE BRUNSWICK-BALKE-COLLENDER COMPANY

10X10 TO THE 1/1000 359-116

Report No. GR03-4

BEAM REFLECTION ERROR		Data Tested <u>2-18-61</u>	
<input checked="" type="checkbox"/> Absolute Error	<input checked="" type="checkbox"/> Max-Plane Error	Tested By <u>GM/2 F-5</u>	
<input type="checkbox"/> Transmission Error	<input type="checkbox"/> Phase Error		
STATION CLARIFICATION		SPACER:	
		Reflector: <input type="checkbox"/> Up <input type="checkbox"/> Down	
TRACE			
RIGHT			
<input type="checkbox"/> Up <input type="checkbox"/> Down			
FREQUENCY <u>1.2</u> MHz		ANTENNA POSITION	
HORIZONTAL POLARIZATION		ANTENNA ELEVATION <u>001</u>	
RELATIVE <u>128810005-3</u>		NAME <u>None</u>	
SERIAL NO. <u>4</u>		GROUND DISCHARGE	

100% LEVEL

Report No. GR03-4

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PROPERTY OF
HORIZONTAL POLARIZATION

FILE 12831005-

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NOTICE

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مجلسه اول در روز پنجشنبه ۱۳۰۲/۱۲/۲۵

44-38861-0186

Cell 1	Cell 2	Cell 3	Cell 4	Cell 5	Cell 6	Cell 7	Cell 8	Cell 9	Cell 10	Cell 11	Cell 12	Cell 13	Cell 14	Cell 15	Cell 16	Cell 17	Cell 18	Cell 19	Cell 20	Cell 21	Cell 22	Cell 23	Cell 24	Cell 25	Cell 26	Cell 27	Cell 28	Cell 29	Cell 30	Cell 31	Cell 32	Cell 33	Cell 34	Cell 35	Cell 36	Cell 37	Cell 38	Cell 39	Cell 40	Cell 41	Cell 42	Cell 43	Cell 44	Cell 45	Cell 46	Cell 47	Cell 48	Cell 49	Cell 50	Cell 51	Cell 52	Cell 53	Cell 54	Cell 55	Cell 56	Cell 57	Cell 58	Cell 59	Cell 60	Cell 61	Cell 62	Cell 63	Cell 64	Cell 65	Cell 66	Cell 67	Cell 68	Cell 69	Cell 70	Cell 71	Cell 72	Cell 73	Cell 74	Cell 75	Cell 76	Cell 77	Cell 78	Cell 79	Cell 80	Cell 81	Cell 82	Cell 83	Cell 84	Cell 85	Cell 86	Cell 87	Cell 88	Cell 89	Cell 90	Cell 91	Cell 92	Cell 93	Cell 94	Cell 95	Cell 96	Cell 97	Cell 98	Cell 99	Cell 100
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ADULTRY ELEVATION POINT

HIGH SCHOOL

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SECRET IN CIPHER

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-324

Report No. **GR03-4**

Date Received **3-15-61**
 Transmitted by **ERT**

Reflector: ☒ **UP**
☐ **DOWN**

Peak Intensity (dB) **10.0**
 Azimuth (deg) **150**
 Elevation (deg) **15**

Distance (km) **10.0**

Frequency (MHz) **10.810005**

Horizontal Polarization **FA**
 Vertical Polarization **FB**

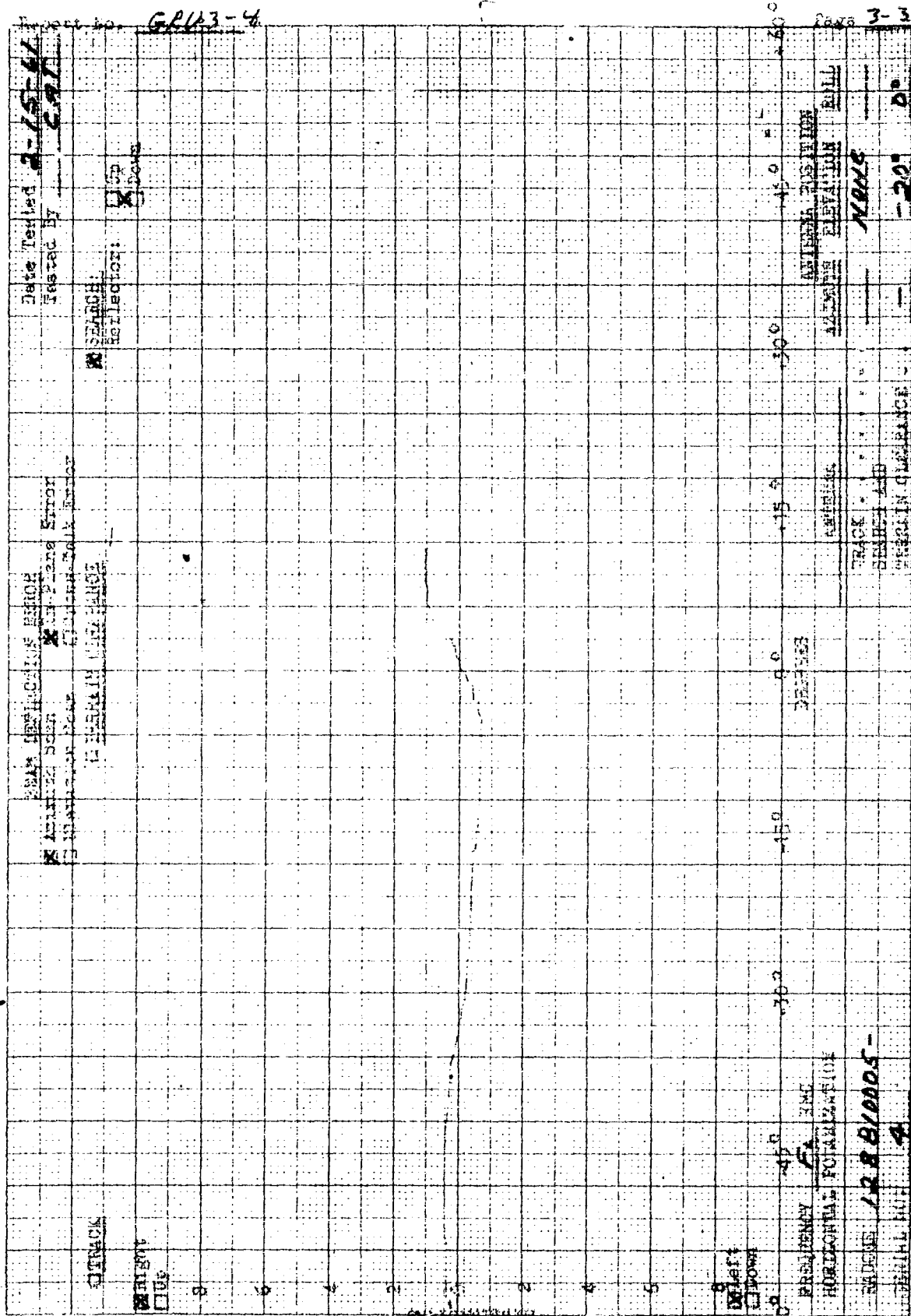
Antenna Position **150**
 Azimuth **150**
 Elevation **15**

Observer **10.810005**

Serial No. **4**

Remarks: **10.810005**

WAVE LENGTH TO THE CENTER OF THE BAND



Date Tested 2-15-47
Tested By C.A.T.

SEARCH: 1300
Reflector: 1300

PEAK INDICATIONS ERROR
X ADJUSTED SIGN
X MAXIMUM PEAK
X MINIMUM PEAK
X REMAIN CLEARANCE

ATTEN DB

ANGLE

FREQUENCY 12.8 B10005
HORIZONTAL POSITION 4

WAVELENGTH 12.8 B10005

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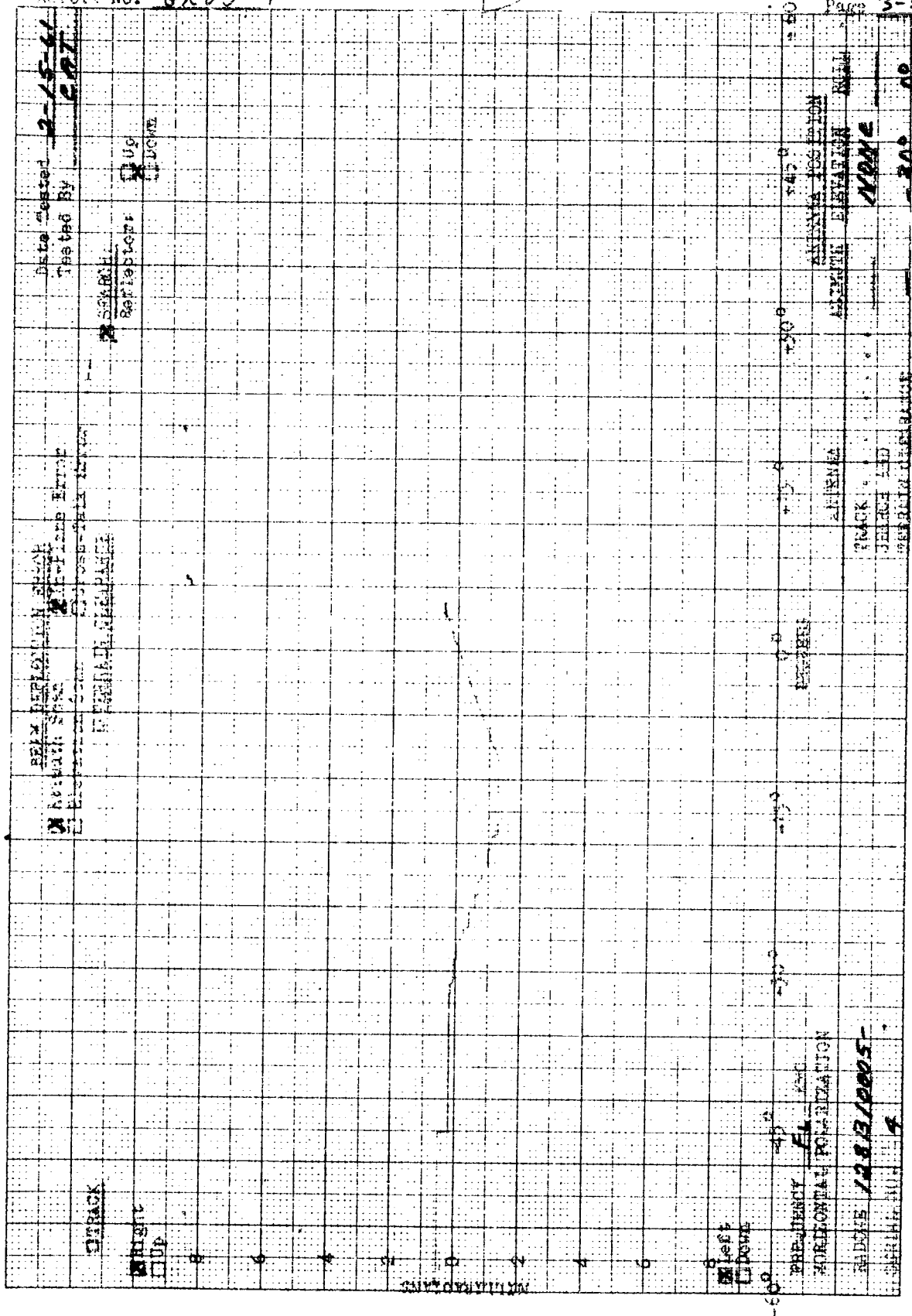
WAVELENGTH 12.8 B10005

WAVELENGTH 12.8 B10005

WAVELENGTH 12.8 B10005

Report No. GR03-4

Page 3-331



SECTION 46

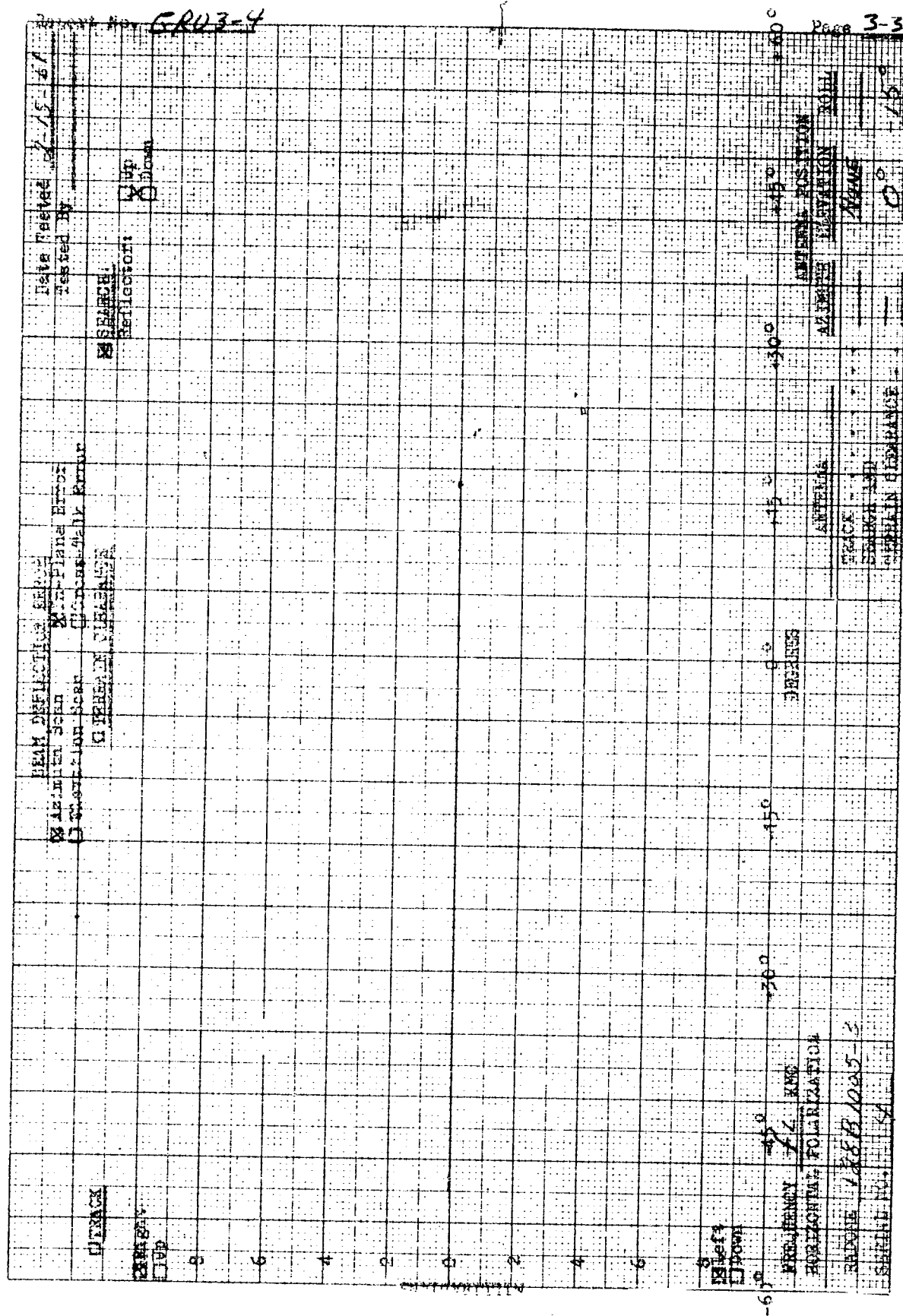
SEARCH ANTENNA BORESIGHT ERROR

F_L @ -15° ROLL, REFLECTOR MID POSITION

GRU3-4

Page 3-333

100% LEVEL

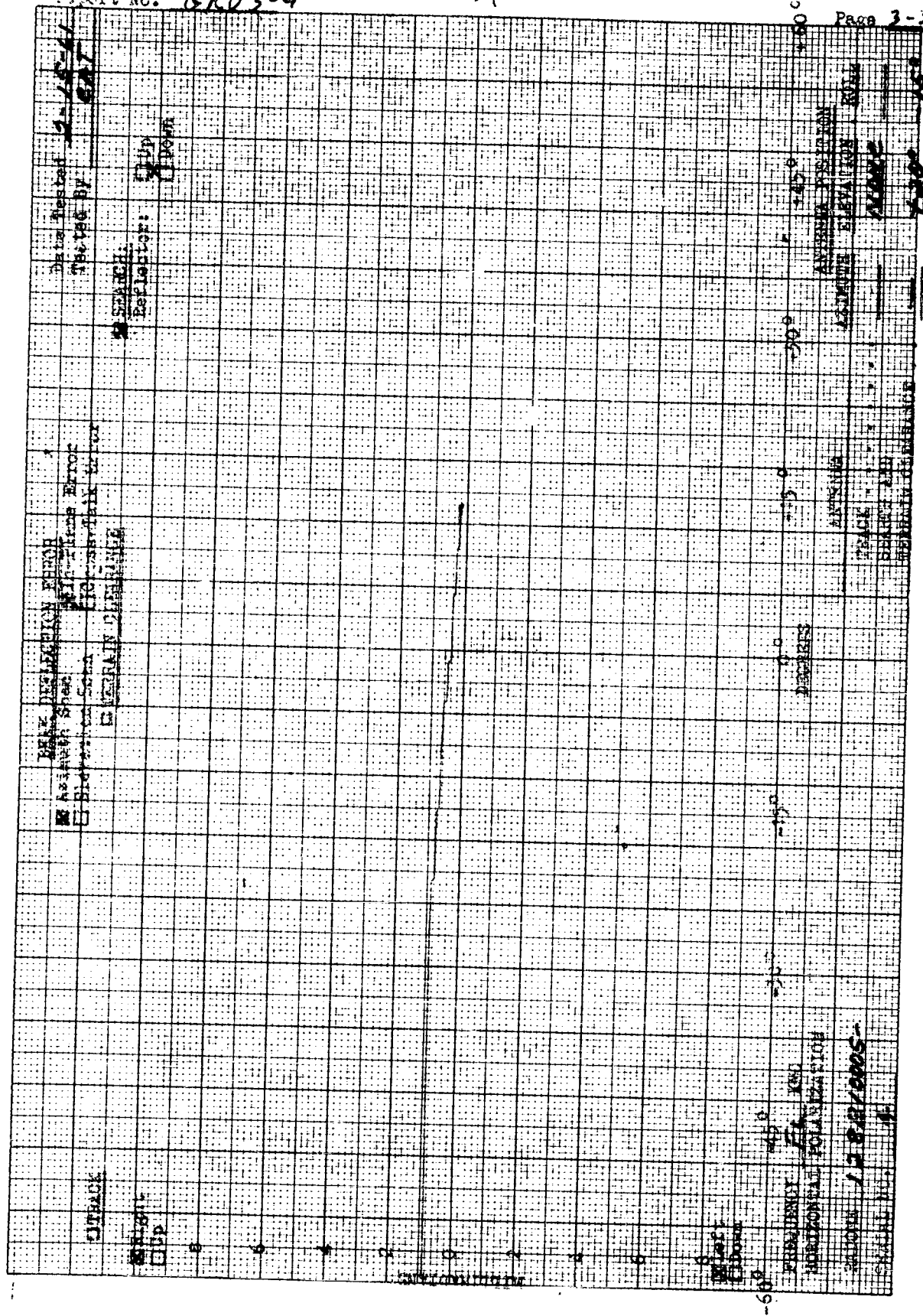


[illegible]

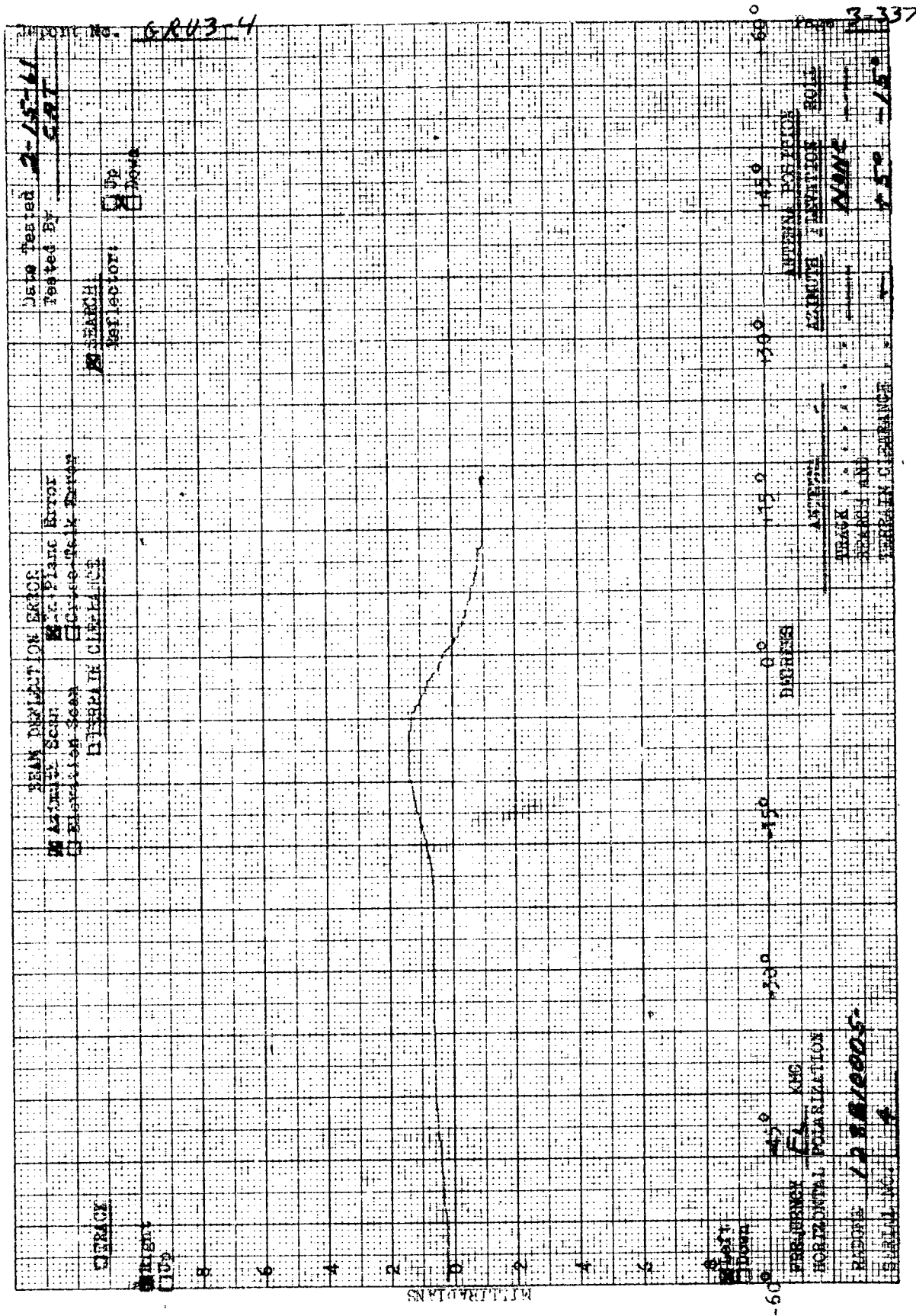
10X10 TO THE INCH 359-110
REFLECTOR

Plot No. GRV3-4

Page 3-335



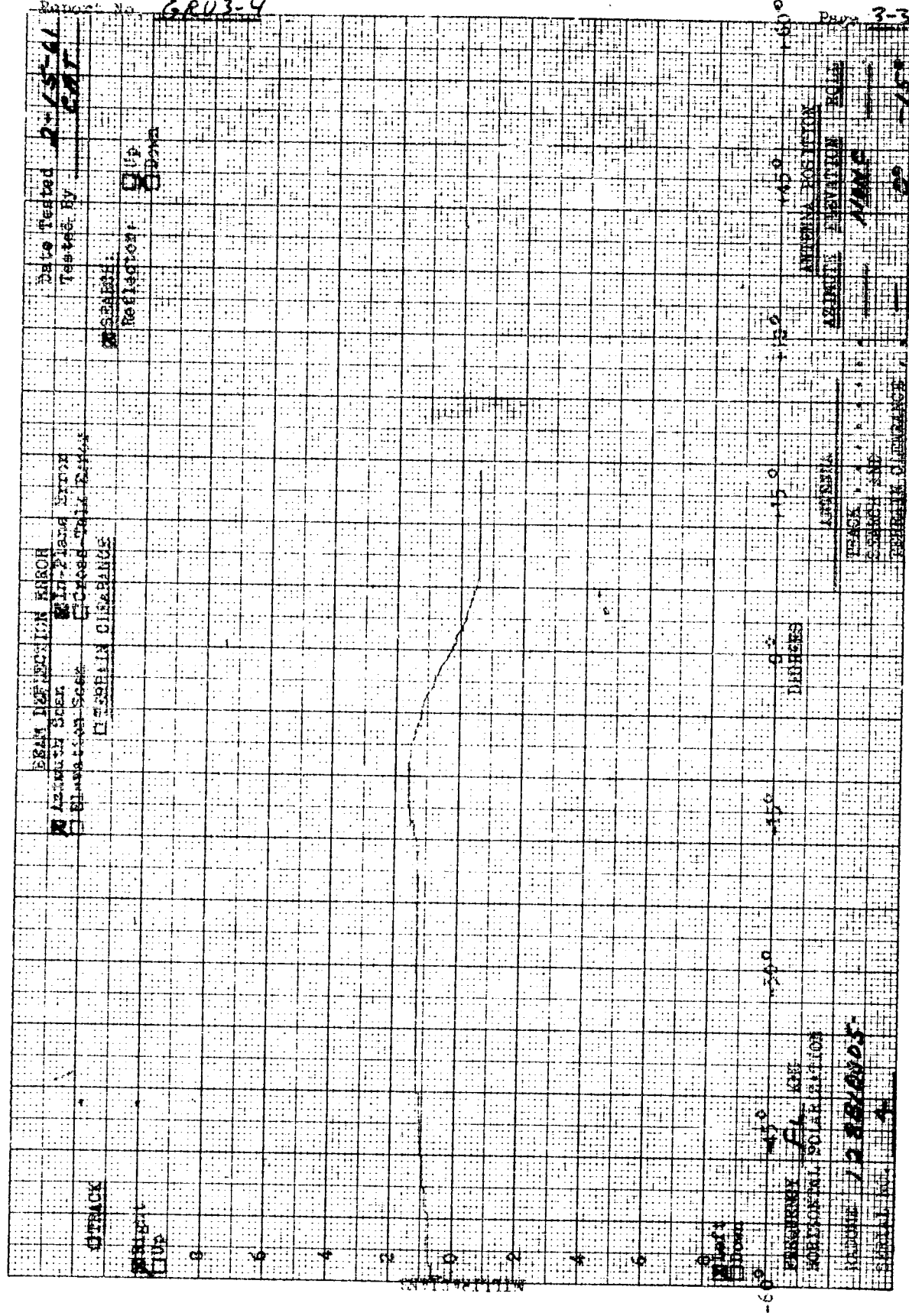
10X10 TO THE MIN. 350-116
REGISTERED



TOXOTOXIN LANCHE 355-110

Report No. GRV3-4

Page 3-338



[illegible][illegible]

GRV3-4

TRACK Night: <input type="checkbox"/> Day: <input type="checkbox"/>		DATA DEFINITION ERROR NO AZIMUTH SCAN <input checked="" type="checkbox"/> NO PLANE ERROR NO ELEVATION SCAN <input checked="" type="checkbox"/> NO SEA-TALK ERROR NO ELEVATION CORRECTION <input checked="" type="checkbox"/>		Data Entered 2-15-61 By: CAT
SEARCH: <input checked="" type="checkbox"/> NO SEARCH Refraction: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		ANTERIOR POSITION 14 MINUTE ELEVATION BULL		
FREQUENCY: <input checked="" type="checkbox"/> F1 <input type="checkbox"/> F2 HORIZONTAL POLARIZATION		150 145 140 135 130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 -5 -10 -15 -20 -25 -30 -35 -40 -45 -50 -55 -60		
RANGE: 12.8810000000		150 145 140 135 130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 -5 -10 -15 -20 -25 -30 -35 -40 -45 -50 -55 -60		
SERIAL NO.: 4		150 145 140 135 130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 -5 -10 -15 -20 -25 -30 -35 -40 -45 -50 -55 -60		

Report No. GRV3-4

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The figure is a large grid with a horizontal line drawn across it. The grid is labeled with various text and numbers. At the top, it says "DATA TESTED" and "TESTED BY". Below this, there are labels for "REFLECTOR" and "UP/DOWN". On the left side, there are labels for "TRACK", "BRIGHT", and "UP". On the right side, there are labels for "TRACK", "BRIGHT", and "UP". At the bottom, there are labels for "TRACK", "BRIGHT", and "UP". The grid is also labeled with "HORIZONTAL POLARIZATION" and "VERTICAL POLARIZATION". There are several numbers and symbols scattered throughout the grid, including "12.8.1000" and "4".

GRV3-4

Page 3-342

UTRACK		SPK DEFLATION SMOO		Date Tested	
<input checked="" type="checkbox"/> Azimuth SMOO <input type="checkbox"/> Range SMOO <input type="checkbox"/> Elevation SMOO		<input checked="" type="checkbox"/> Azimuth SMOO <input type="checkbox"/> Range SMOO <input type="checkbox"/> Elevation SMOO		2-15-61	
SEARCH REFLECTION:		SEARCH REFLECTION:		SEARCH REFLECTION:	
FREQUENCY <u>EL</u> <u>12.8510005</u> HORIZONTAL POLARIZATION RANGE <u>12.8510005</u> SERIAL NO. <u>4</u>		FREQUENCY <u>EL</u> <u>12.8510005</u> HORIZONTAL POLARIZATION RANGE <u>12.8510005</u> SERIAL NO. <u>4</u>		FREQUENCY <u>EL</u> <u>12.8510005</u> HORIZONTAL POLARIZATION RANGE <u>12.8510005</u> SERIAL NO. <u>4</u>	
DISTANCE 0 100 200 300 400 500 600 700 800 900 1000		DISTANCE 0 100 200 300 400 500 600 700 800 900 1000		DISTANCE 0 100 200 300 400 500 600 700 800 900 1000	
ANTENNA POSITION ANTENNA ELEVATION ANTENNA RANGE		ANTENNA POSITION ANTENNA ELEVATION ANTENNA RANGE		ANTENNA POSITION ANTENNA ELEVATION ANTENNA RANGE	
TRACKING TRACKING IN TRACKING OUT		TRACKING TRACKING IN TRACKING OUT		TRACKING TRACKING IN TRACKING OUT	
TRACKING TRACKING IN TRACKING OUT		TRACKING TRACKING IN TRACKING OUT		TRACKING TRACKING IN TRACKING OUT	

SECTION 47

SEARCH ANTENNA SCREW-TIGHT ERROR

P_L @ -30° ROLL, REFLECTOR MTD POSITION

NO. 1000 TO THE 1000 30-110

Report No. **GRU3-4**

EXTRACK FREQUENCY 1280/10005-3 HORIZONTAL POLARIZATION SERIAL NO. 4		DATA COLLECTION ERROR <input checked="" type="checkbox"/> Latency Error <input type="checkbox"/> Reflection Error <input type="checkbox"/> Gross Data Error <input type="checkbox"/> Missing Data		Data Tested 2-25-61 Tested by G.W. D.S. Reflector: <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down	
FREQUENCY 1280/10005-3 HORIZONTAL POLARIZATION SERIAL NO. 4		DATA COLLECTION ERROR <input checked="" type="checkbox"/> Latency Error <input type="checkbox"/> Reflection Error <input type="checkbox"/> Gross Data Error <input type="checkbox"/> Missing Data		Data Tested 2-25-61 Tested by G.W. D.S. Reflector: <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down	

100% LEVEL

[illegible]

Report No. GAU3-4

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TRACK BRIGHT <input type="checkbox"/> UP		REM. DISTANCE FROM TRACK <input checked="" type="checkbox"/> 1000 YDS <input type="checkbox"/> 2000 YDS <input type="checkbox"/> 3000 YDS <input type="checkbox"/> 4000 YDS <input type="checkbox"/> 5000 YDS <input type="checkbox"/> 6000 YDS <input type="checkbox"/> 7000 YDS <input type="checkbox"/> 8000 YDS <input type="checkbox"/> 9000 YDS <input type="checkbox"/> 10000 YDS <input type="checkbox"/> 11000 YDS <input type="checkbox"/> 12000 YDS <input type="checkbox"/> 13000 YDS <input type="checkbox"/> 14000 YDS <input type="checkbox"/> 15000 YDS <input type="checkbox"/> 16000 YDS <input type="checkbox"/> 17000 YDS <input type="checkbox"/> 18000 YDS <input type="checkbox"/> 19000 YDS <input type="checkbox"/> 20000 YDS <input type="checkbox"/> 21000 YDS <input type="checkbox"/> 22000 YDS <input type="checkbox"/> 23000 YDS <input type="checkbox"/> 24000 YDS <input type="checkbox"/> 25000 YDS <input type="checkbox"/> 26000 YDS <input type="checkbox"/> 27000 YDS <input type="checkbox"/> 28000 YDS <input type="checkbox"/> 29000 YDS <input type="checkbox"/> 30000 YDS <input type="checkbox"/> 31000 YDS <input type="checkbox"/> 32000 YDS <input type="checkbox"/> 33000 YDS <input type="checkbox"/> 34000 YDS <input type="checkbox"/> 35000 YDS <input type="checkbox"/> 36000 YDS <input type="checkbox"/> 37000 YDS <input type="checkbox"/> 38000 YDS <input type="checkbox"/> 39000 YDS <input type="checkbox"/> 40000 YDS <input type="checkbox"/> 41000 YDS <input type="checkbox"/> 42000 YDS <input type="checkbox"/> 43000 YDS <input type="checkbox"/> 44000 YDS <input type="checkbox"/> 45000 YDS <input type="checkbox"/> 46000 YDS <input type="checkbox"/> 47000 YDS <input type="checkbox"/> 48000 YDS <input type="checkbox"/> 49000 YDS <input type="checkbox"/> 50000 YDS <input type="checkbox"/> 51000 YDS <input type="checkbox"/> 52000 YDS <input type="checkbox"/> 53000 YDS <input type="checkbox"/> 54000 YDS <input type="checkbox"/> 55000 YDS <input type="checkbox"/> 56000 YDS <input type="checkbox"/> 57000 YDS <input type="checkbox"/> 58000 YDS <input type="checkbox"/> 59000 YDS <input type="checkbox"/> 60000 YDS <input type="checkbox"/> 61000 YDS <input type="checkbox"/> 62000 YDS <input type="checkbox"/> 63000 YDS <input type="checkbox"/> 64000 YDS <input type="checkbox"/> 65000 YDS <input type="checkbox"/> 66000 YDS <input type="checkbox"/> 67000 YDS <input type="checkbox"/> 68000 YDS <input type="checkbox"/> 69000 YDS <input type="checkbox"/> 70000 YDS <input type="checkbox"/> 71000 YDS <input type="checkbox"/> 72000 YDS <input type="checkbox"/> 73000 YDS <input type="checkbox"/> 74000 YDS <input type="checkbox"/> 75000 YDS <input type="checkbox"/> 76000 YDS <input type="checkbox"/> 77000 YDS <input type="checkbox"/> 78000 YDS <input type="checkbox"/> 79000 YDS <input type="checkbox"/> 80000 YDS <input type="checkbox"/> 81000 YDS <input type="checkbox"/> 82000 YDS <input type="checkbox"/> 83000 YDS <input type="checkbox"/> 84000 YDS <input type="checkbox"/> 85000 YDS <input type="checkbox"/> 86000 YDS <input type="checkbox"/> 87000 YDS <input type="checkbox"/> 88000 YDS <input type="checkbox"/> 89000 YDS <input type="checkbox"/> 90000 YDS <input type="checkbox"/> 91000 YDS <input type="checkbox"/> 92000 YDS <input type="checkbox"/> 93000 YDS <input type="checkbox"/> 94000 YDS <input type="checkbox"/> 95000 YDS <input type="checkbox"/> 96000 YDS <input type="checkbox"/> 97000 YDS <input type="checkbox"/> 98000 YDS <input type="checkbox"/> 99000 YDS <input type="checkbox"/> 100000 YDS		DATE RECORDED TESTED BY REFLECTOR: <input checked="" type="checkbox"/> UP <input type="checkbox"/> DOWN	
TRACK BRIGHT <input type="checkbox"/> UP		REM. DISTANCE FROM TRACK <input checked="" type="checkbox"/> 1000 YDS <input type="checkbox"/> 2000 YDS <input type="checkbox"/> 3000 YDS <input type="checkbox"/> 4000 YDS <input type="checkbox"/> 5000 YDS <input type="checkbox"/> 6000 YDS <input type="checkbox"/> 7000 YDS <input type="checkbox"/> 8000 YDS <input type="checkbox"/> 9000 YDS <input type="checkbox"/> 10000 YDS <input type="checkbox"/> 11000 YDS <input type="checkbox"/> 12000 YDS <input type="checkbox"/> 13000 YDS <input type="checkbox"/> 14000 YDS <input type="checkbox"/> 15000 YDS <input type="checkbox"/> 16000 YDS <input type="checkbox"/> 17000 YDS <input type="checkbox"/> 18000 YDS <input type="checkbox"/> 19000 YDS <input type="checkbox"/> 20000 YDS <input type="checkbox"/> 21000 YDS <input type="checkbox"/> 22000 YDS <input type="checkbox"/> 23000 YDS <input type="checkbox"/> 24000 YDS <input type="checkbox"/> 25000 YDS <input type="checkbox"/> 26000 YDS <input type="checkbox"/> 27000 YDS <input type="checkbox"/> 28000 YDS <input type="checkbox"/> 29000 YDS <input type="checkbox"/> 30000 YDS <input type="checkbox"/> 31000 YDS <input type="checkbox"/> 32000 YDS <input type="checkbox"/> 33000 YDS <input type="checkbox"/> 34000 YDS <input type="checkbox"/> 35000 YDS <input type="checkbox"/> 36000 YDS <input type="checkbox"/> 37000 YDS <input type="checkbox"/> 38000 YDS <input type="checkbox"/> 39000 YDS <input type="checkbox"/> 40000 YDS <input type="checkbox"/> 41000 YDS <input type="checkbox"/> 42000 YDS <input type="checkbox"/> 43000 YDS <input type="checkbox"/> 44000 YDS <input type="checkbox"/> 45000 YDS <input type="checkbox"/> 46000 YDS <input type="checkbox"/> 47000 YDS <input type="checkbox"/> 48000 YDS <input type="checkbox"/> 49000 YDS <input type="checkbox"/> 50000 YDS <input type="checkbox"/> 51000 YDS <input type="checkbox"/> 52000 YDS <input type="checkbox"/> 53000 YDS <input type="checkbox"/> 54000 YDS <input type="checkbox"/> 55000 YDS <input type="checkbox"/> 56000 YDS <input type="checkbox"/> 57000 YDS <input type="checkbox"/> 58000 YDS <input type="checkbox"/> 59000 YDS <input type="checkbox"/> 60000 YDS <input type="checkbox"/> 61000 YDS <input type="checkbox"/> 62000 YDS <input type="checkbox"/> 63000 YDS <input type="checkbox"/> 64000 YDS <input type="checkbox"/> 65000 YDS <input type="checkbox"/> 66000 YDS <input type="checkbox"/> 67000 YDS <input type="checkbox"/> 68000 YDS <input type="checkbox"/> 69000 YDS <input type="checkbox"/> 70000 YDS <input type="checkbox"/> 71000 YDS <input type="checkbox"/> 72000 YDS <input type="checkbox"/> 73000 YDS <input type="checkbox"/> 74000 YDS <input type="checkbox"/> 75000 YDS <input type="checkbox"/> 76000 YDS <input type="checkbox"/> 77000 YDS <input type="checkbox"/> 78000 YDS <input type="checkbox"/> 79000 YDS <input type="checkbox"/> 80000 YDS <input type="checkbox"/> 81000 YDS <input type="checkbox"/> 82000 YDS <input type="checkbox"/> 83000 YDS <input type="checkbox"/> 84000 YDS <input type="checkbox"/> 85000 YDS <input type="checkbox"/> 86000 YDS <input type="checkbox"/> 87000 YDS <input type="checkbox"/> 88000 YDS <input type="checkbox"/> 89000 YDS <input type="checkbox"/> 90000 YDS <input type="checkbox"/> 91000 YDS <input type="checkbox"/> 92000 YDS <input type="checkbox"/> 93000 YDS <input type="checkbox"/> 94000 YDS <input type="checkbox"/> 95000 YDS <input type="checkbox"/> 96000 YDS <input type="checkbox"/> 97000 YDS <input type="checkbox"/> 98000 YDS <input type="checkbox"/> 99000 YDS <input type="checkbox"/> 100000 YDS		DATE RECORDED TESTED BY REFLECTOR: <input checked="" type="checkbox"/> UP <input type="checkbox"/> DOWN	

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DATE TESTED 2-15-61 TESTED BY EAT		DATE TESTED 2-15-61 TESTED BY EAT	
SHARCK <input checked="" type="checkbox"/> UP Reflected <input checked="" type="checkbox"/> DOWN		SHARCK <input checked="" type="checkbox"/> UP Reflected <input checked="" type="checkbox"/> DOWN	
MAIN REFLECTION W/TH-Plane Error ASIMMETRY W/TH-Plane Error		MAIN REFLECTION W/TH-Plane Error ASIMMETRY W/TH-Plane Error	
ATTACK		ATTACK	
Left DOWN		Left DOWN	
FREQUENCY 12.8510005 HORIZONTAL POLARIZATION		FREQUENCY 12.8510005 HORIZONTAL POLARIZATION	
WAVELENGTH 23.35 WAVELENGTH 23.35		WAVELENGTH 23.35 WAVELENGTH 23.35	
ANGLE 12.8510005 ANGLE 12.8510005		ANGLE 12.8510005 ANGLE 12.8510005	
ANGLE 12.8510005 ANGLE 12.8510005		ANGLE 12.8510005 ANGLE 12.8510005	

GRV3-4

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[illegible]

10X10 TO REFLECTOR 100 110

DATE TESTED 2-15-61		TESTED BY CAT		REFLECTOR: <input checked="" type="checkbox"/> UP <input type="checkbox"/> DOWN	
BEAM DEFLECTION ERROR		WAVELENGTH 50cm		REFLECTOR POSITION	
<input checked="" type="checkbox"/> WAVELENGTH ERROR		<input type="checkbox"/> DISTANCE ERROR		<input type="checkbox"/> REFLECTOR POSITION	
CIRCUIT CHART		CIRCUIT CHART		CIRCUIT CHART	
ATTACK		DEFENSE		DEFENSE	
HEIGHT		HEIGHT		HEIGHT	
<input type="checkbox"/> UP		<input type="checkbox"/> DOWN		<input type="checkbox"/> DOWN	
5		5		5	
6		6		6	
4		4		4	
2		2		2	
1		1		1	
0		0		0	
-1		-1		-1	
-2		-2		-2	
-3		-3		-3	
-4		-4		-4	
-5		-5		-5	
-6		-6		-6	
-7		-7		-7	
-8		-8		-8	
-9		-9		-9	
-10		-10		-10	
FREQUENCY 15.0 KHz		FREQUENCY 15.0 KHz		FREQUENCY 15.0 KHz	
HORIZONTAL POLARIZATION		HORIZONTAL POLARIZATION		HORIZONTAL POLARIZATION	
NAME 128810005		NAME 128810005		NAME 128810005	
SERIAL NO. 4		SERIAL NO. 4		SERIAL NO. 4	

100% POINT CORRELATION = 95.0%

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TRACK <input checked="" type="checkbox"/> Right <input type="checkbox"/> Up		BEAM DETECTION ERROR <input checked="" type="checkbox"/> Azimuth Span <input type="checkbox"/> Elevation Span <input type="checkbox"/> Force-Link Error <input type="checkbox"/> WEAPON CLEARANCE		Date Tested <u>2-15-61</u> Tested By <u>CAT</u> Reflector: <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down	
FREQUENCY <u>EL</u> AND HORIZONTAL POLARIZATION		ANTENNA POSITION AZIMUTH <u>145</u> ELEVATION <u>145</u>		TRACK AND WEAPON CLEARANCE	
RANGE <u>12.8/1005</u> SCALE NO. <u>4</u>		TRACK SEARCH AND WEAPON CLEARANCE		TRACK SEARCH AND WEAPON CLEARANCE	

THE UNIVERSITY OF CHICAGO

Report No. GRU3-4

Date Tested 2-15-61
Tested By GAJ

SEARCH:
Collection: ☒ Up ☐ Down

BEAM DEFLECTION TRACK
☒ Azimuth Beam ☒ E Plane Error
☐ Elevation Beam ☐ Cross-Track Error
☐ Beam Clearance

TRACK
☐ Right ☐ Up
☐ Left ☐ Down

PERCENTAGE 75 KIN
HORIZONTAL POLARIZATION
RADOME 1288000-8
Serial No. 4

DEFLECTORS
8° 30° 45° 60°
145° 130° 115° 100°
ANTENNA POSITION
AZIMUTH ELEVATION
NOTE
TRACK, SEARCH AND
TARGET DISTANCE
150° 120°

SECTION 30

SEARCH ANTENNA FORESIGHT ERROR

$F_L @ -60^\circ$ RLL, REFLECTOR MID POSITION

100% REVENUE

10X10 TO THE INCH 309-116
 -LJ-EL-64584-00

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DATE TESTED <u>2-14-61</u>		TESTED BY <u>CAF</u>	
SEARCHED <input checked="" type="checkbox"/>		REFLECTOR <input checked="" type="checkbox"/>	
BEAM DEFLECTION ERROR		ANTENNA POSITION	
<input checked="" type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error <input type="checkbox"/> Cross-Talk Error <input type="checkbox"/> Lateral Clearance		ANTENNA TRACK SEARCH AND TERRAIN CLEARANCE	
OFF-TRACK 8 6 4 2 0 2 4 6 8		FREQUENCY <u>5.0</u> MHz HORIZONTAL POLARIZATION RANGE <u>12.80/0005</u> SPECIAL NOTE <u>4</u>	

<input type="checkbox"/> TRACK <input type="checkbox"/> SEARCH <input type="checkbox"/> REFLECTOR <input type="checkbox"/> TERRAIN CLEARANCE		BEAM REFLECTION ERROR <input type="checkbox"/> ANGLE OF SCAN <input type="checkbox"/> ELEVATION SCAN <input type="checkbox"/> CROSS-TALK ERROR		Date Tested <u>2-15-61</u> Tested by <u>CAF</u>		No. <u>GRU3-4</u>	
FREQUENCY <u>12.8610005</u> MHz HORIZONTAL POLARIZATION MAGNETIC FIELD ELEVATION		ANTENNA TRACK SEARCH TERRAIN CLEARANCE		ANTENNA POSITION ELEVATION MAGNETIC FIELD ELEVATION		3-357	

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FORM 10X110 (REV. 1-61) 25-110

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TRACK <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down		BEAM REFLECTION TRACK <input checked="" type="checkbox"/> Azimuth Error <input type="checkbox"/> Elevation Error <input type="checkbox"/> Cross-Talk Error FREQUENCY CLEARANCE		Date Tested <u>2-15-61</u> Tested by <u>CRT</u> Reflector: <u>SEARCH</u> Reflected: <u>Up</u> <u>Down</u>	
FREQUENCY <u>EL</u> kHz HORIZONTAL POLARIZATION TRACK <u>128131005</u> SERIAL NO. <u>4</u>		ANTENNA POSITION ANTENNA ELEVATION <u>100</u> TRACK <u>100</u> SERIAL NO. <u>100</u>		FREQUENCY <u>EL</u> kHz HORIZONTAL POLARIZATION TRACK <u>128131005</u> SERIAL NO. <u>4</u>	

Date Tested 2-15-61
Tested By CA7

BEAM DEFLECTION ERROR
 BE Azimuth Scan ☒ Multi-Plane Error
☐ Elevation Scan ☐ Cross-Hair Error
☐ THERMAL CLEARANCE

SEARCH: ☐ Up ☐ Down
Reflector: ☐ Up ☐ Down

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Jack

HORIZONTAL POLARIZATION

128B10005-
REGIONE

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

BRACK

SEARCH AND SEIZURE

NOTES FOR VETERAN

ZIMMER ELEVATION CELL

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● 2000年10月1日

09-07-2018

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